

Introduction
to the Bengal Administration
Report for
1872-73

1873

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INTRODUCTION

TO THE

BENGAL ADMINISTRATION REPORT

For 1872-73.

IN last year's report the policy which had been chalked out and followed by the Bengal Government in 1871, and up to October 1872, was fully explained. In the period which has since passed there has been comparatively little that is new in the administration. The Lieutenant-Governor has felt that he had already made plans and undertaken tasks the fulfilment of which would give ample occupation for some time to come; and for several reasons he has thought it undesirable to embark largely in many more new plans. He has preferred to devote himself to complete and work out those already formed, with such complements and additions as experience has shown to be required.

But occupied as the past year has been in working out the designs already formed, it has certainly not been a year of less activity than that which preceded it. All departments have been very actively occupied in the work of construction and completion, and in giving practical effect to the completed works. It may be said that the ships of which the lines were laid and the framework put together in the past year have this year been built, fitted, launched, and brought into use, while at the same time a good commencement has been made in sounding and surveying the seas in which they are to sail. In other words, we have considerably advanced in our knowledge of the country and the people, and have made arrangements by which our knowledge may be expected to progress; while we have put in working order

the machinery by which we are to take advantage of that knowledge for the benefit of the people.

To judge of the extent to which a more active interest in, and knowledge of, all that is passing has been awakened in our officers, and a more active and thorough system of administration has been introduced, it is only necessary to compare the local reports of the present day with those of a few years back; the personal grasp of the subjects they deal with, exhibited by all grades of the executive service, with the formal reports and formulated reviews of former days. The local administration reports of divisions and districts for the past year, lately received, are replete with information of the best kind. The Lieutenant-Governor has reviewed them carefully province by province. He has caused these reviews to be published in the *Gazette*, and he proposes that the best reports, with the reviews and orders upon them, should be reprinted and circulated for the information of our officers and of the public. It would be much to be regretted if so much valuable matter were lost or hidden away. Both in action and in report, Mr. S. C. Bayley, Commissioner of the largest and most important Division—that of Patna—is particularly distinguished. Much that has been done in various ways during the year has also been made known by publication in the supplement to the *Gazette*, which contains the official papers deemed to be of most interest. Some of these may also be brought together for more permanent record.

The work of the year being, as above explained, rather the working out of previous plans than the formation of new ones, the details of progress will be more properly put in the departmental chapters than in this preliminary paper. This Introductory Chapter will, therefore, be principally confined to drawing attention to a few of the most salient points of the report, and it will not here be attempted to give such a general account of the administrative proceedings as was given in the preliminary part of last year's report.

The form of report and order of subjects now followed is that lately prescribed by the Government of India for general adoption.

Form of the Report.

A main feature of that plan is that, besides the departmental chapters giving the history of the year, there should

The Statistical Summary.

be given in a more permanent form an account of the system

and the principal matters connected with the country and the administration which are necessary to a proper understanding of the annual reports. The idea was, it is believed, that such an account should be compiled or revised once every five years, or thereabouts, so that the repetition of the same facts might not be necessary, and the permanent or quinquennial summary should be taken as a basis and starting of all reports till it is revised and a new point of departure is taken.

It was not positively required that this more permanent account, comprised in what are marked in the instructions as 'red letter chapters,' should be wholly prepared in the present year; but this Government has been able to compile most of what is wanted through the very active and effective labours of Mr. H. J. S. Cotton, c.s., to whom, both for this work and for his excellent work in connection with the Annual Report, the Lieutenant-Governor is very especially indebted.

As these red letter chapters may be eventually expanded and completed, it has been thought better to collect them together with a separate paging, so as to keep them distinct from the annual report and admit of future additions. This compilation has been entitled 'Statistical Summary,' and will, it is hoped, be found to contain much very useful information. It commences with an account of the 'Physical Features, Climate, Chief Staples' and productions of the territories under the Government of Bengal, which is full of important matter. It then gives an 'Historical Summary' showing the rise and progress of the system of civil administration, which the Lieutenant-Governor believes will be found particularly valuable, inasmuch as, so far as he is aware, no such history of our civil institutions exists in any other form. The existing 'Form of Administration' is then explained and detailed. There follows a chapter on the 'Character of the Land Tenures,' including the system of land settlement. We have not yet full information regarding the land tenures of Bengal, but it is believed that we can already give more on the subject than has ever been available before. There is next an account of the Civil Divisions of these provinces. The Chapter on the Census is a summary of the very interesting information obtained by the census of the past year, and is of extreme novelty and importance.

As connected with this last subject, there is then inserted a Chapter on a subject which is not in the list prescribed by

the Government of India, but which yields to none in importance, and information regarding which was specially sought by the Secretary of State: viz. the Condition of the People. It was mentioned in last report (Part I, page 39,) that the Secretary of State, in reviewing a previous correspondence on the subject, had commended it to the careful consideration of the present Lieutenant-Governor. More recently the question was raised, in connection with the fever prevailing in Burdwan and Hooghly, whether the people were not predisposed to disease by want. Sir George Campbell then explained that he had not thought it desirable to undertake a specific inquiry immediately following the inquiry previously made, but that he had made the acquisition of information regarding the condition of the people a main object of all his inquiries and all his measures. The Commissioners and District Officers had been desired specially to notice the subject in their annual reports, and much interesting information had been received. It has been thought then that it would be appropriate to place in the Statistical Summary a Chapter showing the general result of the information so far available regarding the condition of the people. A special inquiry has been ordered in Burdwan and Hooghly to ascertain whether the fever can in any degree be specially attributed to causes connected with the condition of these particular populations, but the result of that inquiry has not yet been received.

Next follows a Chapter on the 'System of Public Instruction,' in which the measures adopted for educating the people of Bengal, and especially the new system of elementary education for the masses, are explained. It is unnecessary to dilate on the vast importance of this subject.

Finally, a brief account is given of the Frontier States and Tribes with which we have relations, and unfortunately sometimes little wars, and of the various feudatory estates attached to Bengal and administered on a semi-political system.

Turning to the Annual Report, it may be said that the Principal subjects of the Annual Report. most important undertakings which have been matured during the year are:—

The strengthening and extending the Executive Machinery of the administration, by which more permanent and experienced officers have been invested with a more effective control over all departments in each district; and an inferior machinery has been provided by means of which

the responsible officer may acquire knowledge of and administer their districts.

The registration and valuation of the landed tenures of every degree over a great portion of these provinces, and the introduction of a system of local taxation for local purposes by the successful assessment of the Road Cess in the districts so valued for the purpose.

The introduction of the system of Primary Education, which is acknowledged by all to have succeeded beyond the anticipations of the most sanguine, and which fairly promises to effect the much-needed education of the masses of Bengal, if we can only find the funds to continue and extend it. Very moderate funds are needed, for it is the cheapest possible system.

It has been felt and acknowledged that Statistics pretending to exactness are worse than worthless unless they are grounded on sufficient data, and it has not been attempted to show too great results in this respect, especially as the new establishments by which these results are to be attained have only recently been entertained. But a much improved knowledge of the country and of the condition of the people has been already gained, and a commencement has been made of systematic measures to obtain more accurate statistics, vital, agricultural, and commercial, which have already begun to bear some fruit.

The new subordinate machinery and the local institutions created by the Road Cess Act had hardly been tried, and our statistical inquiries had not in any degree approached maturity, when the present failure of the crops came upon us; but it may already be said that the improvement of our executive machinery has come quite providentially at the very time when it was most wanted to save us from the weaknesses which former famines had made apparent. Already the new subordinate establishments everywhere render the most active and useful service. And the Road Cess Committees have furnished, ready to our hands, the means of spreading widely over the distressed districts works fitted to relieve the labouring poor. We are dealing with a people whose numbers, condition, and needs, we know far better than formerly, though in truth we still know them very insufficiently.

The best form in which the superior administration of these provinces can be cast has formed the subject of discussions during the year, in connection with the efforts of the

Lieutenant-Governor to concentrate the governing authority, as he has concentrated the district authority, and to shorten the official chain. Sir George Campbell is strongly of opinion that the position of this Government should be either raised or lowered. Either the Government must be strengthened with advertence to the vastness of its territories and responsibilities, or it must be reduced to more limited functions. The Government of India has inclined to the alternative of reducing its territories and relieving it of the political affairs of the frontier, and a scheme for forming the Eastern territories, including all Assam, with Sylhet, Cachar, and the adjacent hills, into a separate Chief Commissionership, is now, it is understood, under the consideration of Her Majesty's Secretary of State. At the same time, the superior administrative machinery of Bengal none the less admits of improvement, and if the separation of the territories to form the Eastern Chief Commissionership be finally sanctioned, the proposals made in respect to the Bengal Administration must be reconsidered and readjusted. Sir George Campbell holds to the belief that some such concentration of the superior offices and shortening of the chain as he has suggested, would be an immense improvement.

At the same time he much feels that a theoretical concentration can have little practical effect unless there is at the same time a physical concentration in amalgamated public offices, such as he has for some time striven to obtain. While suitable public offices have been provided for almost all other administrations, this, the greatest of all, is miserably housed in a variety of tumble-down and hired houses all over Calcutta. In the first chapter of the annual report, page 3, will be found an account of the various efforts made by the Lieutenant-Governor to secure a site in order to build the offices for which he had provided considerable funds, and of the objections which the Government of India unfortunately found to them. The object then remains unattained, but it is one of the greatest possible necessity.

The large agrarian questions which have been raised by difficulties between landlords and ryots in Pubna, Orissa, and elsewhere, have rather suggested reforms and improvements (such as we have tentatively attempted in Government and Wards' estates) than received a solution. This subject will be further noticed in the present chapter, and the latter part of the Chapter on 'Changes in the Administration' more fully explains what has occurred, and the views set forth in a

correspondence between this Government and the Government of India.

The new Code of Criminal Procedure, which effects several great improvements in the most prominent portions of our law most affecting our daily administration, has been introduced with much benefit and success, and has given us in India a system probably more rational and more free from legal prejudices than is enjoyed by any other part of Her Majesty's dominions.

Notices of many other reforms and questions of an importance great, though perhaps inferior to those just mentioned, will be found in subsequent portions of the report. In this chapter they can only be very briefly touched on.

According to practice, external and border affairs may first be glanced at. Bengal is

Frontier affairs.

seldom wholly at peace. We have had the Looshai expedition one year, the Garo expedition another, and now we have a Duffla expedition on our hands. But the undertakings of previous years, instead of leading to fresh complications, have happily ended most successfully in the cessation of devastating raids and the establishment of peace and order in the parts of our frontier to which they were directed. It may be hoped that such little wars, not aiming to extend our frontier but to settle and consolidate it, are a good economy in the end.

The past year has been, in fact, one of much activity on several parts of our frontier. The standards of the em-

The Garo Expedition.

pire have not receded, on the contrary they have been somewhat advanced. This Government was permitted to undertake a small expedition to reduce the independent Garos and to bring within our knowledge and under our control the large portion of the Garo Hills which have hitherto been marked as unexplored. These hills gave cover to a people of unquiet and marauding character, never yet subdued by Hindoo, Mahomedan, or any other power, and whose depredations have annoyed us from the earliest times of our rule. The expedition was most successful. With little bloodshed or loss the independent country was completely occupied and subjected. Armed police posts have since been maintained within it, the ordinary petty tribute paid by the hill people has been exacted, and complete arrangements for the administration of the territory, suitable to a simple people, have been made by Captain Williamson, an

officer whose success in this work has been remarkable. There is every reason to believe that this virgin nest of robbers has been already turned into a quiet and well-regulated British district, abounding in minerals, timber, cotton, and elephants. The subjected Garos now give no trouble whatever, and the first contribution to our new Economic Museum consists of some extraordinarily fine pods of cotton grown in their country.

Following on the Looshai expedition, a large portion of the Looshai country has been brought within the familiar knowledge and political control of our officers, and most of the remainder has been explored and mapped by parties who have had friendly relations with the tribes. The Looshai raids have entirely ceased, and our subjects and tea-planters in Cachar, Sylhet, and Chittagong, extend their cultivation in peace.

The Looshais.
In the Naga country south of Assam we have also considerably pushed forward our explorations and political influence; important geographical discoveries have been made, and further discoveries are believed to be imminent in the course of a farther exploration about to be undertaken in the ensuing season. The massacre of a large party of a Naga tribe (chiefly women and children) on the borders of our settled territories by a hostile tribe of the same race, has led to a consideration of our position in regard to the whole of these Naga tribes. Although in this case reparation and a surrender of the skulls of the victims has been obtained, it is felt that something must be done to put a stop to such atrocities on our borders as well as to obviate the constant risk of collision between the Nagas and our tea-planters. The Government of India having accepted the views of this Government, it has been determined to fix the boundary between the regular Assam districts and the Nagas; and with respect to these latter to do what can be done, cautiously and gradually, to bring them under political control. Arrangements are in progress to effect those objects.

The Naga Raid.
On the subject of dealing with the tribes with whom we are brought in contact on our Eastern Frontier, the Lieutenant-Governor has expressed himself as follows:—

“All our past experience convinces the Lieutenant-Governor that the best way of dealing with these Eastern

tribes is to establish a political police among them and become familiar with them. We then stop their raids as we have stopped those of the Garos, the Angamies, the Khasias, and it is to be hoped the Lushais. While we leave them unknown in their obscure hills and jungles, there is no security whatever against the raids which continually occur. Once we know them, we find them very amenable to authority."

In the north of Assam, where the mountains (the eastern portion of the Himalayas) are less known than those in the

The Duffla Raid.

south, it is more difficult to settle any definite policy. We have in the past year suffered from one of the frontier difficulties to which we are always liable; a large tribe of a people for some years quiescent, the Dufflas, having broken out and carried away into captivity a large number of Duffla colonists in British territory. Our officers having failed to obtain satisfaction, our relations with these people have been broken off, a blockade has been established, and measures to bring them to terms or punish them are being carried out by a considerable force furnished from the regiments ordinarily stationed in Assam. We have not, however, gone to any considerable expense to form a movable column. It is left to the local officers to do the best that circumstances will admit. Carriage is the great difficulty in these cases, and the Lieutenant-Governor has expressed the opinion that we shall never deal effectively with frontier difficulties in Assam till we have an efficient coolie corps to work on the roads in peace and carry the baggage in war.

Hitherto there had been no definite boundary between Assam and the Bhootas. Such a boundary has been successfully laid down during the year, and our rights in the important hill post and mart of Dewangiri (formally ceded to us after the Bhootan war, but which had almost slipped out of our hands,) have been reasserted.

On the occasion of the Lieutenant-Governor's visit to Darjeeling, the relations of the British Government with

Sikkim.

the state of Sikkim, lying between the British territories and Thibet, have been drawn much closer than they ever were before. The Rajah and his family for the first time visited British territory, and arrangements have been made which will, it is hoped, lead to a great increase of our geographical knowledge of and trade with these parts, and which may, if things go as we hope, bring us into nearer communication

with Thibet,—the shortest, easiest, and most frequented route to which lies through Sikkim.

Details of all these and other transactions will be found in Chapter II, on Frontier Affairs.

The Eastern frontier districts having been declared by the Secretary of State subject to the special provisions of the Act XXXIII Vict., Cap. 3 (enabling the Government to legislate in a summary manner), a Regulation has been made under this Act to obviate the great political dangers resulting from the unrestrained dealings of European British subjects and others with the wild frontier tribes, and laying down a line beyond which trade and settlement are subject to a special control.

Among the Western aborigines, too, our policy has been successfully carried out, and quiet has there prevailed throughout the year.

Under the new *regime* a settlement of the Sonthal Pergunnahs is in progress which promises to give satisfaction to the people and to do justice to all parties. Since these Sonthals have been freed from the operation of laws which pressed on them with unfair severity, the anxieties which they had occasioned have been completely quieted.

The Sonthal Pergunnahs.

The countries farther west held by the tribes of Kols and other aborigines formerly considered wild, have been as usual successfully managed by Colonel Dalton and Mr. Ravenshaw.

Orissa tributary estates.

Among the wildest of these tribes, the demand is for education. Perhaps the most unique instance of beneficial self-government and self-taxation to be found in India is among the Khonds on the further borders of Orissa, who so lately were notorious for human sacrifices and other barbarities habitually perpetrated. So civilised are they now that, while last year they voluntarily taxed the grogshops and devoted the proceeds to the institution of primary schools, this year they have of their own accord proposed and levied a house-tax for roads to bring them into communication with the world.

The Kol countries of Chota Nagpore are peculiarly interesting. We have now a large settled agricultural population whose manners and habits are totally different from those of the Hindoos, and among whom Christianity has made much progress. They are a docile race, and an exceedingly prolific

Chota Nagpore tributary estates.

one ; and from having been needy and troublesome savages are now among the quietest and most contented of our subjects.

Turning now to the more important subject of the internal administration of these provinces, it may be stated that

Internal administration.

the past year has been peaceful and prosperous. We are now unhappily under the shadow of a great calamity,—the failure of the autumn crops ; but the result of the measures taken to alleviate it cannot yet be known, and that must be the most important chapter in the history of another year. Meantime we may safely say that the prosperity and abundance of the year just past go far to mitigate the suffering which must follow the present unfortunate failure.

Confining ourselves then to the past year, the freedom from political difficulties or social anxieties which we have enjoyed, has enabled the Government and its officers to devote itself with unremitting attention to the works of progress which we have had in hand. There has been a singular subsidence of any rumours of Wahabee conspiracies and such like troubles throughout the country ; and excepting the rent disputes in limited parts of the country, which have raised large agrarian questions above alluded to, the country has been free from political excitement of any kind.

In Chapter I, on the Changes in the Administration, the reforms in the administrative system made or suggested are fully set forth.

All the plans described in the last report have been steadily followed out, with the exception only of the proposed new system of municipal and communal administration, to which a stop was put, inasmuch as the Viceroy was pleased to veto the new Municipal Act passed by the Bengal Council. Other plans, of which the projects were then inchoate only, have been matured. Perhaps feeling less sure of its ground as in complete accordance with the views of the present Government of India, this Government has been less willing than previously to embark in anything which had not been already sanctioned and commenced, and a good many things have latterly been submitted to the Government of India in respect of which no serious and decisive action has been taken, their consideration by that Government having been postponed for a time.

The system under which, both at the head-quarters of the Government and in every district, authority is more centralised, and the working of the departments is controlled

and brought to a common action, has been put into effective, and, it is hoped, successful practice.

At the same time, far from taking from local authority, narrowing local discretion, and reducing local activity by centralisation in the sense of more complete subjection to the central authority, the object of the Government has been to extend the power and enlarge the freedom of well-ordered local authorities, to trust officers selected as worthy of trust, and to give to the people as much self-government as circumstances permit.

This the Lieutenant-Governor desires prominently and

Conduct of the services.

confidently to say, that, so far from measures of reform and improvement having met with opposition, active or passive, from the officers of Government, as has been sometimes supposed, he has received in his measures the most hearty and efficient co-operation from his officers, with very rare exceptions indeed. He feels thoroughly sensible that without their complete assistance it would have been impossible to do what has been done. They have worked most zealously and efficiently, and his very best thanks are due to them.

The public services in these great provinces are so great and numerous, that the Lieutenant-Governor shrinks from the attempt to single out and distinguish particular officers in a report of this kind. If he were to mention some as particularly deserving, he would be compelled to omit very many others of much merit, in a manner which might seem invidious. He will therefore here only state his general appreciation of, and thanks for, their services.

In the Civil Service the change of which the design was

THE CIVIL SERVICE.

Parallel promotion in the Executive and Judicial lines.

explained in the last report, and by which it was hoped to obviate the evils arising from too frequent changes, and to secure more permanent, more efficient, and more experienced officers for the charge of districts and other important posts, has been sanctioned by the Government of India and Her Majesty's Secretary of State, and carried into effect. The main feature of the plan is what has been called promotion in parallel lines; that is, Civil Servants, instead of being almost of necessity changed from the executive to the judicial line, and *vice versa* at every frequently recurring step of promotion, are invited after some years' service to choose one line or the other, and having chosen are ordinarily kept

to that line. To effect this change it was necessary so to adjust salaries that it would not be necessary to promote every Magistrate-Collector of a district to be a District Judge for the sake of the increase in salary. The Lieutenant-Governor's wish has been to equalise the salaries of the two lines, and the arrangement sanctioned has made a large approach to this object. We thus have some Judges somewhat younger than in former days, but as the Lieutenant-Governor has pointed out, these men will seldom be of less than 12 or 15 years' service, and 35 to 40 years of age, and they will in the end be much more experienced as judicial officers than if their promotion had been delayed. On the other hand, we have many Magistrate-Collectors of greater experience and weight than formerly, who have been longer in charge of and know more of their districts, and who receiving better salaries are content to remain in their posts much longer than formerly. So far the desired object has already been achieved in a very high degree.

Permanency of Officers.

On the other hand, it must be admitted that in the inferior grades of the service, covenanted and uncovenanted, permanency has not yet been attained. The present leave and other service rules are so favorable to change, the varieties of climate and of amenities or disamenities in Bengal stations afford such temptations to seek change, the habit of going frequently to Europe has so much grown among the European servants of Government, and so many of the native servants so persistently strive by every device to avoid and get rid of out-of-the-way and disagreeable stations, that it is very hard indeed for those who administer so great a Government with such a mass of Government servants, to hold its own against so many who for one reason or other seek change. So many interests are set in motion, that it is a matter of extreme difficulty to avoid the necessity of making several changes when a vacancy occurs before things settle down. It is, in fact, a sort of game of chess, as it were, in which the Government is very unequally pitted against a great many players; and it is hardly possible to give to each move the attention and the calculation of contingencies which is necessary to avoid being taken at a disadvantage by one or other of them. The Lieutenant-Governor has been, he may say, shocked to find how many changes have occurred during the year among the sub-divisional and other subordinate officials of some districts, in spite of all his struggles to avoid change.

The scheme for providing subordinate executive establishments under the Sub-divisional Officers, which was mentioned in the last report, having now been sanctioned by the Government of India and approved by Her Majesty's Government in England, has been recently carried into effect. Consequently we have an executive machinery, such as has never existed in Bengal before. Our local Magistrates are no longer almost entirely judicial in their functions. A large proportion of the districts of these provinces have been, and when the scheme is complete all will be, sub-divided into three, four, five, or six divisions, and each outlying sub-division is in charge of a selected officer, who has under him an assistant available for all executive and some judicial work, and one or two subordinate executive officers. He is thus no longer completely tied to his head-quarters office, and is now able either himself or through his deputies to make local inquiries and to become acquainted with the country and the people. A certain proportion of these sub-divisions are entrusted to young Civil Servants who have served their first apprenticeship, and to whom these semi-independent charges are the very best experience; while most of these charges are held by those native and other uncovenanted officers who are deemed best fitted for such duties.

One of the officers of the sub-divisional establishment is called 'Canoongoe,' a title taken from the earlier regulations of the days of the Permanent Settlement and the generation following, in which, as is well known, the Canoongoe was designed to occupy so important a position as head of the machinery by which full information regarding tenures and rents and agricultural affairs was to be collected, the landholders and village accountants being bound to render their annual returns to the Canoongoes. It is not to be supposed that all the functions of the Canoongoes (who were for long altogether wanting except in Orissa) can be performed by the single officer attached to a large sub-division; but now that the Road Cess Act has revived in another form the original and fundamental obligation of the landholders to render an account of subordinate holdings and ryots' rents to the Canoongoes, it seemed appropriate that the Government should, as far as may be, fulfil its obligation by appointing an officer to receive these returns as Canoongoe. The arrangement may be taken as an earnest and beginning of a return to the old system under which we sought to have some

knowledge of affairs connected with the land, and to secure some system of reliable account between the tillers of the soil and the landholders, inferior and superior.

In all these reforms connected with the district executive, the Lieutenant-Governor has been fortunate enough to obtain the approval and support of the present Viceroy and his Government, and to that support he owes it that he has been able to carry out his plans without delay.

According to the design mentioned in the last report, the opportunity afforded by the creation of the subordinate appointments to which allusion has just been made has been used to put the Native Civil Service on a better footing. The Lieutenant-Governor has much felt that with a large and increasing supply of highly-educated young men, it was most undesirable that the greater proportion of them should waste their time in idleness, in the hope that by favour or interest there would fall to a very few among their numbers a few appointments of a grade far beyond their position and experience, and which, leaving comparatively little for them to aspire to in after years, would not content in the long run men thus so prematurely promoted. Sir George Campbell has, therefore, carried out the design of insisting that educated young men desirous of entering the civil service of the Government should do so in a position suited to their years and experience. And he has also thought it right that the road to promotion should be opened to men serving in the inferior grades, whose character, experience, and education, fitted them for promotion. The system of special education for the civil service and examination in the subjects most likely to fit a man for such a career, which was previously indicated, has therefore been systematised and carried out. The examination is not a properly competitive examination for the available appointments, but candidates are examined and classed; only those who have passed are eligible for appointments, and great regard will be had to the comparative results of the examination in selecting young men from among them. The Government has pledged itself that promotion to the higher appointments shall be made from among the passed men who, having entered the lower grades, have there shown practical capacity and merit, and that Deputy Magistracies and such like appointments shall not in future be given to inexperienced outsiders.

The latter part of Chapter I. deals with subjects which are mainly connected with land tenures, and in Chapter III will be found an account of various proceedings which come under the head 'Administration of the Land,' including the waste land question.

It was previously mentioned that the Road Cess valuations have involved a record of tenures and rents such as we have never before had in Bengal. The necessity for some such record has become every day more apparent. The questions arising between landholders and ryots would probably have necessitated the maintenance of some regular system of public record and account even if there had been no question of taxation. Allusions were made in the last report to the illegal cesses and dues levied by the zemindars. These questions have become still more prominent during the past year. An account of what has occurred is given in Chapter I, pages 20 to 39.

The inquiries in Orissa have brought to light a state of things which could hardly have been credited; so completely were the rights of the ryots, once well established and formally recorded, over-ridden by the superior landholders. In that province the state of things was entirely different from Bengal. A regular settlement had been made some thirty-five years ago. The rights of the ryots were not only acknowledged, but ascertained, recorded, and secured by documents issued by Government direct. But the Bengal Board of Revenue entertained a strong dislike to the old system of public record through village and pergunnah accountants, which has been maintained in other parts of India. In Orissa these indigenous institutions had been in full force, but they were suppressed and disused. It has consequently happened that the records made thirty-five years ago have never been continued or kept up, and the inquiries recently made have shown that the landholders, who derived from the settlement very limited rights, have systematically set themselves to destroy and obliterate the rights of the ryots, have deprived them of their titles, changed their lands, and largely raised their rents, contrary to the pledges of the Government. In Bengal, where no records were made, the ryots have to a certain extent profited by the very common ignorance of the zemindars of everything connected with their estates, and the present relations between zemindar and

ryot have only gradually grown out of the old relations of tax-farmers and peasant holders. It was mentioned in the last report that the zemindars have not generally sued in the Courts for rack-rents, and that they have to some extent substituted irregular and illegal cesses and taxes. It was mentioned that an inquiry on this latter subject had been undertaken. It was found that in truth these irregular levies were much larger, more numerous, and more universal, than the Lieutenant-Governor had at all suspected. Although at the time of the Permanent Settlement most of such demands were abolished as far as the law could abolish them, and all that remained were amalgamated with the rent, a fresh crop of them has since grown up with a rank luxuriance.

In addition to the extra cesses levied on the cultivators, there is a system of levying transit and market dues, of old native origin, but which had been formally abolished before the Bengal settlement was made permanent. Compensation for the loss of these receipts was made to the zemindars and is still paid to them, while all future exactions other than regular rents for lands, shops, and buildings, were strictly prohibited, as explained in the last report. It turns out, however, that taxes of this kind are still very abundantly levied even by people who receive compensation for their abolition.

The Lieutenant-Governor has felt himself unable to deal radically with these abuses till he has authority for doing so from the Government of India, and is assured of support by legislation, such as is required to carry out the spirit and intent of the old laws of the permanent settlement, the machinery of which has become rusty and insufficient. As respects the cesses levied in addition to rent, he has himself doubts whether we can interfere with a strong hand in Bengal to the general advantage, till we take up, deal with, and revise the relations between landholders and ryots as a whole, and he has accordingly issued the instructions which will be found in Chapter I.

In Orissa, however, where the rights of the ryots were once defined, Sir George Campbell thinks that we are bound to interfere to restore and protect these rights, and to revive and continue the old system of record. He has strongly recommended a measure of that kind to the Government of India, but that Government has not yet acceded to the proposal. The most important part of the correspondence will be found in Chapter I.

The Regulation of 1793 (No. XXVII of that year), by which transit and market dues were prohibited, was swept away at Simla in 1871 by one of the repealing Acts in charge of a Bengal Officer who considered it obsolete, and the matter can now only be regulated by a more modern enactment. The Lieutenant-Governor has submitted to the Government of India the necessity for such a law, and the subject is still under consideration, as also explained in Chapter I.

Meantime the unsettled questions between landholders and ryots have been brought into prominence by what are known as the Pubna rent disturbances. This district at the

The Pubna rent disturbances.

confluence of the Ganges and Berhampooter is one in which the ryots have some independence of character, and have of late acquired some knowledge of their rights. It appears that the zemindars had been in the habit of levying very heavy illegal cesses. More recently, probably alarmed by the inquiries into those cesses, and foreseeing the effect of the obligation to return a statement of rents by which they would be bound in case the road cess (already in operation in the neighbouring districts but not in Pubna) was extended to Pubna, the zemindars became anxious to consolidate the cesses with the rents, and to take the opportunity of obtaining at the same time a large increase of rent. But they had not served the legal notices of enhancement by which enhancement must be preceded, and legal means would be tedious, expensive, and difficult, in these days when the ryots of Eastern Bengal have learnt to unite for common action, and the courts have expounded the laws in a manner favourable to the ryots, for which the landholders were not prepared. In this dilemma they attempted to obtain their object by irregular and illegal pressure. Some of the more unscrupulous zemindars certainly put on much improper pressure of this kind, and attempted by this means to obtain very unfair, extortionate and illegal documents binding the ryots to pay largely increased rents, to pay all cesses imposed or to be imposed by Government, whether on the occupier or the owner, to surrender the right of occupancy in case of difference with the zemindar, and altogether to place themselves at the landlords' mercy. There can be no doubt that in thus attempting to overrule the law and obliterate the rights of the ryots, some of the zemindars acted very illegally, and that the first fault lay with them.

But trade unions are an old institution in India, and local ryots' unions are common enough in Eastern Bengal. The ryots who were hard pressed by the worst zemindars, and who had nearly yielded, obtained the support of their fellows, who knew that their turn would come next, and a very extensive ryots' union was formed and rapidly spread. Then, as is so apt to happen in such cases, some of the men of the union committed themselves by breaking the peace and the law. There was a violent and threatening outbreak, of which of course many bad characters took advantage. The deeds of the rioters were enormously exaggerated; in reality they did nothing of a very atrocious character, but there were serious breaches of the peace, a little plunder of property, and some old quarrels were worked off. There was no loss of life or very serious personal injury. But the landholder class was thoroughly alarmed, and terrible stories of the atrocities committed by an excited Jacquerie have been told all over Bengal and partly believed in.

The rioters never for a moment resisted the authority of Government; they never went further than to report that the zemindars were to be abolished, and they were to be the Queen's ryots. The peace was completely restored without military or other extraneous aid, and the rioters have been duly punished. The Lieutenant-Governor was immediately after the riots close to the scene of the disturbance, and after fully discussing the matter with the local officers, he issued a proclamation which will be found in Chapter I, page 30. The object was to warn the ryots against illegal action, while legal rights were recognized.

The people showed extreme avidity to obtain copies of the proclamation, and they seem to have understood and acted on it to a wonderful degree. There has not since the date of its issue been, so far as is known to Government, a single breach of the peace of an agrarian character in the district. But the rent unions have been as active as ever. The ryots have met the demand of the zemindars for too much by offering too little. It has been asserted by the zemindars' party that the ryots combine to pay no rents; that in fact there is a dangerous spirit rising under the influence of which the ryots will refuse all payments to them, to the Government, or to any one else. There is nothing to show that there is truth in this suggestion. There have been no attempts to throw off all rents; where rents have been refused, it is clear enough that it is generally because the amount to be paid is in dispute.

No doubt, however, under present circumstances the zemindars have the worst of it. They are not in a position to sue for enhanced rent; the cesses they have levied are not recoverable by law; the levies of rent have been so irregular, and there has been so much variety and dispute in regard to the proper length of the measuring rods (in Bengal all these things depend on local custom, varying in every locality), that they may have much difficulty in showing what are their proper rents: and while they fail to come to terms with the ryots, the latter, by refusing to pay, may reduce to considerable straits those landholders who live from hand to mouth. The ryots well understand trades union tactics, and are far too wary to make compromises which give no security for the future, or to allow some of their number to make indifferent terms with weak landlords, leaving the others to be dealt with in detail by strong landlords.

Having thoroughly established the peace and put the parties in a position in which they may assert or maintain their rights by legal means, the Lieutenant-Governor has much considered the question, What is the farther duty of the Government in the matter? He feels assured that a general resort to litigation must be very expensive and very ruinous to both parties. At the same time he has not seen his way to interfere by legislation without raising very great questions which cannot be settled without long dissensions and very difficult debates, if settled they can be. His course has been to attempt to promote compromise by influence and advice. He has addressed himself to the best of the zemindars, and desired the local officers to do so. The zemindars have been urged to offer reasonable terms of present settlement and future security to the ryots, and the ryots are strongly advised and urged to accept such terms as the Government officers think reasonable. Considerable success has attended these efforts, but the result is not fully known.

Meantime there has been a remarkable subsidence of unhealthy excitement.

The organs of the zemindars (whose position has been shown to be at present the worse) have urged direct Government interference by means of a Commission empowered to settle differences. The Government of India has also suggested this solution. On this subject the Lieutenant-Governor has expressed himself in terms which will be found in Chapter I, pages 33 to 39.

It has been said that the Lieutenant-Governor has been unwilling to interfere too much as regards illegal cesses, or to settle formally the questions arising between landlords and tenants, till we are prepared to deal thoroughly with the very great questions involved in, or connected with, these subjects. The truth is that a considerable portion of the revenue law of Bengal is now somewhat old and rusty; some more of it that is modern is tinctured to some degree with those peculiar Bengal ideas which in the Lieutenant-Governor's judgment have failed in practice; and the whole is in a disjointed and little homogeneous form which seems to suggest codification. Not only, however, is this a great and difficult work, but the Lieutenant-Governor has been, as he has explained in writing on the subject, much debarred by the fear that many of the old land-marks of Bengal revenue law which are of the essence of the permanent settlement, but are now very distasteful to the zemindars and are called obsolete, may be lost or mutilated in the process. He much wishes to retain on the statute books the very letter of the Regulations of 1793, including the preamble. He cannot too strongly assert this, that almost all the reforms which he has sought to effect are in the direction of returning to the principles of 1793, not of departing from them. There is hardly any measure connected with the land which he could now desire which is not admirably set forth in those old enactments, so far as the general principles are concerned. The machinery for carrying them out only is antiquated, while the interests and prejudices which have since grown up are difficult to overcome. Sir George Campbell distrusts any version of the old laws which must be manipulated in the face of the strong interests arrayed against them. It was not long ago proposed to repeal the old laws for the maintenance of the public accountants of the early regulations, the Canoongoes and Patwaries, but happily this was not carried out. In fact it was found that the Patwaries had retained an unexpected vitality. In Behar they had fully survived, and they are now being properly reorganised. In many parts of Bengal they were rediscovered in the course of the Census operations, reduced to subordination to the zemindar, it is true, but still alive and in some sort effective. It has been explained that a necessary function has been found for the old office of Canoongoe in connection with the Road Cess returns. Influenced by such facts as these and by the considerations abovementioned,

the Lieutenant-Governor would not embark on any revision and codification of the revenue law of Bengal which should involve the loss of any of the essential parts of the old laws. But if this be duly secured, he believes that the time has come when some parts of the revenue law may be revised with advantage. Many improvements in regard to the Sale law, the law of Partition, the law for registering Mutations, and other laws, might be effected. Whether there should be any revision or large amendment of the Rent-law is a great and difficult question in itself, into which it would not be desirable to enter here. But it may be stated that, seeing all that has passed in the North-Western Provinces and elsewhere, Sir George Campbell feels very averse to re-open the questions which are settled by the present rent law, which have been worked out by the Courts in a manner to which the people are accustomed, and any re-opening of which would certainly lead to much turmoil and difficulty. In Pubna it seems to be rather abuses outside the law than the law itself which have opened the door to disputes difficult to settle. There is not in Bengal any of that repugnance to or disposition to evade the main provisions of the law which is said to prevail in the North-Western Provinces.

Upon the whole Sir George Campbell would now recommend, as the result of his latest consideration of the matter, that a general consolidation of the land revenue and rent laws should not be attempted, but that some particular laws or groups of laws, such as the sale laws, should be carefully revised on the first convenient opportunity. A settlement and regular record of rights for all Bengal and Behar is an enormous work which may be at some time attempted, but the considerations affecting that subject need not be further discussed in this place.

Chapter IV recites the "Course of Legislation" during the year. To what is there stated

Legislation.

it may be added that the Embankment and Drainage Bill and the Bill regulating Emigration to the Eastern tea districts have since been passed. All important business pending before the Bengal Legislative Council has thus been disposed of, except the Mahomedan Marriage Bill. The new law regarding Embankments and Drainage is one of very great importance. The excess of water and the gradual silting up of the water channels are the sources of very great evil in Bengal; and the establishment of a system by which floods may be restrained, and still more by which

stagnant water may be drained off, will be, it is hoped, a great blessing to the country. The new Emigration Bill will, it is believed, satisfactorily settle several important questions relating to the emigration to the tea districts. It is a work which has been completed with much care and labour.

Chapters V, VI, VII, and VIII, state the most important questions which have been dealt with during the year in connection with the Police, Criminal and Civil Justice, and Jails. Allusion has already been made to the introduction of the new Code of Criminal Procedure.

The new Criminal Procedure Code.

There is no doubt that among the rich natives and lawyers, who had come to think an unlimited system of appeal and an endless re-opening of any case in which a man who could pay weighty lawyers was interested a natural and necessary right, there was a considerable feeling of apprehension and alarm on account of some of the provisions of the Code. The new provisions substituted some modern common-sense rules for those relics of old legal fashion which had till lately subsisted in the Criminal Code, and rendered the mode of trial and the record in simple cases somewhat more summary and simple than under the system before prevailing, by which the trial was drawn to a length and the record involved a tedious labour unparalleled in any other civilised country. In introducing these provisions this Government, however, deemed it right to proceed with care and caution. The summary powers were only trusted to officers of proved experience and judgment. They were cautioned against being too summary, and in other respects the new provisions of the Code were carefully watched. After a full trial the new summary provisions have been very favorably reported on; they are clearly a great improvement and success. The alarm among the natives of the higher classes has subsided. They have had no reasonable ground of complaint, and the hope of getting rid of a law equal to all classes having been lost, clamour has subsided. The innovation by which European British subjects were for the first time subjected to the tribunals of the country for ordinary criminal offences was also a great change, which a few years ago would have created endless clamour. The Legislature deemed that men selected as the Civil Servants of the Crown in India are now selected might be trusted to exercise functions approximating to those exercised by Magistrates in other countries over their own countrymen as well as over others.

The European community have accepted the change in their status (which formerly placed them above the criminal law), so long inevitable, in the very best spirit. They have found that there is no avidity on the part of the Magistrates to subject them to pains and penalties, and that in fact to the respectable European settlers the difference is rather matter of sentiment than one of much practical effect. There have been literally no complaints on the part of the Europeans.

Several of the new provisions which seemed strangest to English lawyers, such as the power of a Judge to refer to the High Court the verdict of a jury from whom he differed, and the power of the Appellate Courts to enhance punishment when they deem it right to do so in cases brought before them in appeal, have proved eminently beneficial, worked as they have been with the care and discrimination which the position of the High Court has secured.

Altogether the new Criminal Procedure Code may be confidently stated to have been a remarkable success, and the few points in respect of which experience shows that amendment may prove to be required are of the most petty character.

Opportunity has been taken of the provisions of the new Code to try the system of making over certain classes of cases to Benches of unpaid Magistrates, sitting with a paid Magistrate in serious cases and alone for petty municipal and such like cases. This system, though not without its difficulties, has very considerable advantages in many cases, both judicially and as a means of political education. In Chapter VI, page 117, will be found a somewhat important discussion regarding the appointment of Honorary Magistrates.

A difficult question regarding the duties of British Magistrates was raised in the past year with reference to the serious accidents and loss of life which have attended the moving of the unwieldy cars of Juggernath in different parts of the country. In order to prevent such accidents it has been necessary for the European Magistrates to take a very active part in the moving of the cars, and they have sometimes personally directed the operations, even to sitting on the car and directing its movements. The matter has formed the subject of a correspondence with the Government of India.

In Chapter VII particulars are given regarding the Jail reforms, which have so much engaged the attention of this Government, and the condition and health of the prisoners.

Under the very able management of Mr. Heeley, the present Inspector-General, the jails have been very greatly improved.

In Chapter VIII will be found a discussion regarding suggested reform in the administration of Civil Justice, in which the Lieutenant-Governor's views are set forth.

Chapter IX shows the progress of the system of the Registration of deeds, for the extension of which greatly increased facilities are now afforded.

In consequence of the veto of the new Municipal Bill there have been no very great changes in the Municipal Administration, but Chapter X gives an account of the working of the various existing municipal systems under several different Acts, and of the minor improvements which have been effected during the year. The several systems of taxation in the different municipalities are explained. In the latter part of Chapter XXII (Provincial and Local Finance,) will also be found a concise statement of municipal revenues, and tables showing the incidence of municipal taxation in large and small towns, and as compared to other Indian provinces.

The principal reasons recorded by His Excellency the Viceroy for vetoing the Municipal Bill were the following:—

That the measure was calculated to increase municipal taxation in Bengal, and such increase was unnecessary and inexpedient at the present time.

That His Excellency was unable to assent to those portions of the Bill which allow the provision of elementary education to be made obligatory upon first and second class municipalities (*i.e.*, on cities and towns as distinguished from villages).

That His Excellency also objected to a provision enabling Town Municipalities to give relief to the poor in time of exceptional scarcity and distress.

That His Excellency thought the time had not come when it was desirable to create the machinery for the government of villages proposed in the Bill.

The measure had been in the first instance introduced with the view of consolidating and improving the Municipal Law of Bengal, now scattered through a variety of discordant enactments. The Lieutenant-Governor had wished rather to give the tax-payers a free choice in regard to the form

of taxation than generally to add to their burdens. It had been his object to introduce self-government in towns and villages rather than to urge the rapid undertaking of many improvements by means of increased taxation. He had in fact been prepared to sacrifice much to real self-government, and had pledged himself to give the greatest possible amount of freedom to the municipal bodies in respect of the amount and character of taxation, if the Bill had become law.

The people of Bengal, accustomed to detailed legislation, would have regarded with the greatest suspicion and dislike the apparently simple, but really very wide, municipal Acts by which in other provinces the forms of taxation and modes of municipal management are left very undefined, subject only to the Government sanction and control. The new Bengal Act was therefore necessarily very full and detailed, setting forth with some minuteness what the Government and the Municipal Committees should or should not have it in their power to do, and particularising all the various forms of taxation from among which they might choose. It was, however, the Lieutenant-Governor's hope that by reducing the compulsory expenditure to a minimum and rendering all the rest really and truly optional, an interest in real self-government might have been created, and considerable improvements of a character appreciated by the people themselves might have been effected with little or no increase of taxation.

The Government of India having called for careful returns of taxation from the various Indian provinces, it was shown that in Bengal the rate and incidence of municipal taxation is at present extremely low, far below that of any other provinces. As shown in the tables taken from the figures published by the Government of India, and given in Chapter I, page 19, and Chapter XXII, pages 366, 367, the municipal taxation in Bengal is confined to a smaller proportion of the population than in any other province except Madras, and falls on that municipal population at a rate far less than in any other province including Madras, being at the rate of 5 annas and 10 pie, say $8\frac{1}{2}d.$ per head, against $12\frac{1}{2}$ to $20d.$ per head in other provinces.

Seeing, however, how broad was the principal ground on which His Excellency the Viceroy had vetoed the Act of the Bengal Council, and how difficult it would be to devise any new Municipal system which might not give rise to apprehensions

of increased taxation, resulting from increased activity and extension of the system, if not from increased incidence of taxation; seeing also that the Lieutenant-Governor had other reforms in hand which would give the Government of Bengal much occupation, Sir George Campbell came to the conclusion that it was not expedient that he should at the present time make another attempt to consolidate and reform the Municipal law of Bengal, and he therefore announced to his Council that he abandoned that task for the present, and would probably leave it to his successors. Considering the great labour bestowed by the Council on the rejected bill, and the valuable matter which it is admitted to contain, the infructuous Act, with the papers and proceedings relating to it, have been reprinted in a volume, which it is hoped may be of use hereafter; and so the matter rests.

One or two minor amendments suggested by the Viceroy's remarks have been made in the old Acts, the most important being a provision to enable the Government to cause the election of members of the Municipal Committees. The Lieutenant-Governor's apprehension, however, is that one great difficulty must be to make a good beginning in the first instance, by getting the people, usually apathetic on the subject, to take an interest in their affairs; and he does not expect that they will ever take such an interest unless the elected committees have real and considerable power in respect of taxation, as well as in the application of the funds. Of the two Municipal Acts now principally in use, one makes the Committees merely consultative, and the other confines taxation to the form of a regular house tax, which is disliked by the people and is inapplicable to all but a few metropolitan or quasi-metropolitan towns. On this account Sir George Campbell is not sanguine of the success of the present elective system. He has, therefore, not attempted to urge it in any Municipality, but has made known his willingness to grant it to any Municipality which is desirous to have it. One such application has been received from Serampore, near Calcutta, and an election has just taken place there. Seeing how many almost separate people dwell together in an Indian community, the Lieutenant-Governor adopted, by way of experiment, the plan of making the votes neither collective nor cumulative, but giving one vote to each person, so that each considerable guild or section of the community may

have its representative. There was some healthy competition in the Serampore election.

The part of the lost Municipal Act which the Lieutenant-Governor has most regretted, is that which provided for village communes a simple municipal form of self-government. He is more and more convinced that as the old village institutions have become lost, and the patriarchal power of native rulers has died out, while landholders become more and more speculators in rents and less and less leaders of the people, some form of self-government for the people whom we are educating into intelligence and independence is a very crying

Village communes. necessity. The whole subject is one of very great and growing importance. The experience of the Census has shown the existence of imperfect, but still existing, representatives of the old village headmen and other old institutions. A successful system of rural communes for Bengal would be an achievement of overwhelming importance.

If only to supply one most crying need, viz. wholesome drinking water, some communal system seems very necessary. In former days natural channels flowed less obstructed than they do now; and the official zemindars, responsible for the revenue and the people, and subject to the Government, did in some sort execute the works necessary to save revenue and lives. Now-a-days not only have many channels silted up by natural processes, but, with the extension of cultivation and the assertion of exclusive private rights, channels are obstructed and drainage prevented by artificial means. The modern landholders are content with the largely increased rents which natural unaided progress has given them; the power of the Government and its officers over them exists no longer, and they seldom do what is required for the well-being of the villagers. The cry regarding water-supply which comes up from Bengal villages is deep and constant. It is the subject on which the people feel most acutely, and in respect of which they are really ready to help themselves if only some system for their doing so by a common effort could be organized. Some of our most experienced officers think this deficiency of wholesome water an evil which is increasing and threatening to destroy the prosperity of several of our best districts, and, echoing the people, they are most urgent for a remedy. Hospital, medical, and jail statistics, show clearly that the death-dealing scourge of Bengal is not fever, nor even cholera, but the forms of bowel diseases

which are attributable to impure water.* What each villager cannot do for himself to remedy this great evil, a body of villagers working under a communal system would very gladly do.

To other hands the present Lieutenant-Governor must resign and commend the great task of organizing rural communes.

Meantime, the Act which constituted village unions for police purposes, containing as it does some provisions which are in the Lieutenant-Governor's view objectionable, and being, perhaps, subject to the disadvantages apprehended by the Viceroy without all the corresponding advantages of a communal constitution, has not been further extended at present.

Before leaving this subject of Municipalities, one word must be said of the Calcutta Municipality, to the position of which allusion was made in the last report. The Lieutenant-Governor is more and more convinced that the present constitution of that Municipality is not good. There is too much of a spurious independence. There has been occasion for question whether a body of well-to-do householders have not preferred to reduce the direct house taxation when taxation affecting a poorer class had perhaps greater claims to consideration. The Justices are so far independent of the Government that the Government really is not responsible for the great and weighty matters affecting the metropolis of India which are involved in great undertakings and much expenditure of money with a rapidly increasing debt. Not being in a position to interfere with dignity and effect, it is compelled very much to abstain from interference. On the other hand, the Committees of Justices and such bodies to whom many things are now delegated, are not efficient for executive work, as was, for instance, prominently brought to light by the failure of the Calcutta Census. The position of the Chairman is exceptionally difficult and unpleasant, and it is only in the case of a singular personal influence that any officer so placed can combine efficiency with smoothness of working—the one is almost necessarily sacrificed to any attempt to obtain the other. As stated in the last report,

* NOTE.—The imperfect returns of death and disease collected by the Statistical Department show most deaths from fever; but the unskilled natives call almost everything fever, and the accurate medical statistics of our hospitals and jails show almost everywhere the same result, viz. that dysentery and diarrhoea are much more destructive than fever.

much had been achieved by Mr. Hogg, but the Lieutenant-Governor much fears that some very important questions have lately drifted. His personal opinion is that the Municipality should be radically reformed. At the same time, to devise a good constitution for such a town is a work of extreme difficulty; and, perhaps, discouraged by the ill-success of his endeavours for municipal reform, the Lieutenant-Governor has not yet attempted it. In the latter part of Chapter X will be found particulars regarding the Calcutta Municipality.

In Chapter XI, "Marine," besides other matters will be found a statement of the
Marine.
The Calcutta Port Trust.

affairs of the Calcutta Port Trust, which has continued to progress most successfully during the year without any drawback whatever. The Commissioners under the Trust have already provided the Port of Calcutta with excellent modern facilities such as it has never before had, and it may reasonably be hoped that the Port will soon be as well off in this respect as almost any Port in the world. This has been effected without any increase of charges, but, on the contrary, with some immediate, and the prospect of still further future, decrease.

Chapter XII gives a careful account of the Weather, Crops, and Prices during the year 1872-73, as derived from reports now more carefully made than formerly. The general result of the accounts from the various provinces is decidedly good, the season having been, as before observed, favorable and the country prosperous during the year to which the reports refer.

In Chapter XII, Agriculture and Horticulture, will be found an account of all that
Agriculture and Horticulture.
has been done towards the establishment of experimental farms and gardens, of the management of the Botanical Gardens, and of the progress made in the cultivation of cinchona and ipecacuanha. An experienced chemist sent from England has arrived, and has commenced operations to turn the cinchona bark into quinine and other fever-curing alkaloids. His first experiments give promise of providing this great blessing to the people of India at a very moderate expense. This chapter also gives some account of what has been done towards obtaining reliable agricultural statistics, and explains the inquiry which has been undertaken into the production of jute, and some inquiries made regarding tea, cotton, tobacco, safflower, and other products.

Mention is also made of the new Economic Museum.

The New Economic Museum.

Sir George Campbell is profoundly convinced of the great importance of obtaining an adequate knowledge of the products of the country. He is much inclined to favour the idea of an Economic Survey lately put forward by Dr. Forbes Watson. As a first step, he has thought it well to provide a place in which specimens of our productions may be placed and made accessible to the public; and with this view he has adapted and fitted up a building in the heart of the business portion of Calcutta which is, he believes, admirably suited for the purpose of an Economic Museum. It now only remains to fill it. Three gentlemen, excellently qualified to deal with the subject, have kindly consented to take it in hand, and it is hoped that progress will soon be made. The Chapter of the Statistical Summary on "Physical Features, Climate, and Chief Staples," contains an account of the most important productions and industries of these provinces.

Chapter XVI explains what has been done and designed

Forests.

in regard to Forests, and Chapter XV gives such information as we

Manufacture and Mines.

have regarding the progress of

Manufactures and the working of Mines in the past year.

Chapter XVI gives somewhat full information regarding the course of Trade in 1872-73.

Trade.

The statistics of sea-borne trade are stated with precision; and there will further be found much, though not yet by any means complete, information regarding the internal trade of the country; this last being the first fruits of the measures recently adopted to obtain information on the subject.

Chapter XVII gives the total expenditure on Roads,

Roads, Canals, and other Public Works.

Canals, and other Public Works of all kinds, and states what has been

done in the department of ordinary public works as distinguished from irrigation works and railways. It will be seen that several important roads have been pushed on, and that several much needed buildings have been carried almost to completion, in a very short space of time and in a way which reflects much credit on the officers of the Public Works Department employed at the Presidency. The new Presidency College in particular will supply a very great want.

The imperial assignments for public buildings are, however, much smaller in proportion than those made to Bombay,

and it is therefore impossible that we can enter into an architectural rivalry with the latter city. Till we have proper accommodation for the Offices of the Bengal Government and Administration, we must be sadly deficient in the buildings necessary to the capital of so great a country, even though Justice has been housed in the new High Court in a manner of which we need not be altogether ashamed. The necessities caused by the failure of the crops have caused the postponement of a projected new Custom House and other buildings which are much wanted.

The entire absence of any proper jails in Bengal has rendered it necessary to devote a large portion of our funds to this necessary provision, which, in other provinces, had already been made from imperial funds.

In Chapter XXII (Provincial and Local Finance), page 323, will be found a detailed account of the financial arrangements now made for the various classes of public works.

Chapter XVIII deals with the great Irrigation works now in progress in these provinces.

Irrigation Works.

This is a subject attended with much difficulty and anxiety, inasmuch as it raises most perplexing questions which the Lieutenant-Governor cannot say that he has seen his way to solve. It will be seen that the total expenditure will be enormous, while financially we have been most unfortunate. In Orissa the premature attempt to secure a large revenue ended disastrously, as explained in the last report, and caused much irritation and discord. It was certainly the right course after what had occurred to abstain scrupulously from anything like compulsion or undue forcing of our water on an unwilling people. Under a revised system and improved free-trade management, harmony and confidence have been restored; but still the difficulties resulting both from the tenure of the land and the unwillingness of the people to pay for water till reduced to extremity by failure of the rains, are so great that we have not succeeded in getting voluntary customers, except to an extent ridiculously disproportioned to our expenditure and our works. On the other hand, the experience of a year of drought has made us feel that when the country is threatened with famine it will be practically impossible to maintain the rates and rules made to encourage those who take a regular supply and to charge adequately those who only take water when it is exceptionally precious. When the cry of famine is upon us, and there

is a rush for water, we cannot enforce too strict rules ; we are obliged to relax them, and did relax them in the past season.

In Orissa there seemed to be a serious failure of the rains in September, and many cultivators rushed to the canals

for water. A few of them did, in fact, pay for water (for about 1,500 acres) at rates higher than those of the early season, but just then rain fell, and all the applicants who had not completed their bargain disappeared. There has since been abundant rain and no need for canal water ; the unfortunates who paid for the 1,500 acres are laughed at by their fellows, and irrigation prospects are again discouraged.

On the Midnapore canals, on the other hand, the irrigation had hitherto progressed much better than in Orissa,

though still on a small scale. This year there was much greater failure of the rains than in Orissa. There was a really extensive demand for the water, the rules were considerably relaxed, and it was believed that the day of triumph had come. But unhappily all these prospects were darkened by a circumstance which the projectors of the canal do not appear to have taken into account, though it seems obvious enough ; the supply of water in the river which feeds the canals failed in October and November, just when water was most wanted. Short rivers rising on the surface of dry uplands must fail when the rains fail. Though there was by no means so excessive a drought in Midnapore as in the rest of Bengal and Behar, the supply to the canal fell to 300 feet per second at the time when water was most necessary to the crops. This quantity will not suffice for much more than about 30,000 acres ; so much was irrigated, but many applicants were sent away without water, and even to some of those to whom we had engaged to give it a very short supply was available. It seems then that we cannot safely engage to irrigate very much more than 30,000 acres without the fear that we shall fail to do what we have undertaken to do in every dry season when the rains cease early. It is seldom that the water is an absolute necessity at any other time, and the serious question arises whether we can undertake to extend our irrigation subject to this risk, and how we are to distribute the supply when we have not enough for all. If we must confine our irrigation to the area which we can securely irrigate, the return for the capital expended will be little or nothing. In fact hitherto, as the statements show, taking all

the canals together, the irrigation revenue has not paid the expenses of collection, far less the cost of maintaining the canals.

On the other hand, the unfinished Soane canals, while yielding no revenue, have been this autumn a real blessing to the country, and have much better prospects. The works not being complete, it was not intended to attempt irrigation this season, and it would have been impossible to do so on any revenue-paying system; none of our machinery was ready. Any attempt to charge for water would have done harm, as did the premature forcing of revenue in Orissa. It was deemed, then, that it was the best policy, not only on grounds of humanity, but also as the best financial policy in the end, to give water as far as possible without asking for payment, in the belief that while increasing the food supply we should also accustom the people to the use of the water and make it popular. Too much praise cannot be bestowed on Mr. Lvinge, the Superintending Engineer, and his staff for the energy and good will with which, setting aside all professional red tape and all difficulties, they went to work to supply water by any means through the unfinished canals and to extemporise the means of distributing it into main channels, subsidiary channels from which the people gladly made. The result has been that upwards of 120,000 acres have received water in the districts of Shahabad and Gya, either to save the rice or to enable the people to sow the cold weather crops, and irrigation is still going on. Immense good has been done, and the canals are at present deservedly most popular in those parts. The Lieutenant-Governor believes that the Soane canals have really very much better prospects than the others, and that within certain limits their greater or less success is assured. Whether in ordinary years, when there is a full rain-supply, the people will consent to pay such rates as to render the canal remunerative, remains to be seen; but that the water will always be taken to a considerable extent, the Lieutenant-Governor has no doubt. The Soane has this great advantage, that it retains a supply of about 3,000 feet per second in the cold weather, and we shall be thus enabled to supply a large extent of irrigation for the spring crops. Sir George Campbell had inclined to keep the works within the limits of an area which could be at all times supplied, in dry seasons as well as

in wet ones, till at least we should see our way further. Plans for so much had been prepared, and all that was so arranged was put in hand under the sanction of the Government of India as soon as the failure of the present year threatened scarcity. His Excellency the Viceroy has since determined on further extensions which are about to be put in hand.

The failure of the crops in the sub-Himalayan districts of Northern Behar has caused the revival of plans for irrigation from the Gunduck and other streams of that region. In connection with the Gunduck embankments, which have just been sanctioned, a plan for a small flood-season canal in the ditch behind the embankment has already been approved. But as regards larger projects the most difficult question still arises whether we can properly undertake canals which may probably not pay in ordinary years, and when we cannot really exact famine rates in the bad years, against which the canals are a sort of insurance.

Even if the Soane canals, kept within dry-season limits, may eventually pay, it is
 Irrigation Problems. Sir George Campbell's belief

that almost all other canals which can be devised in those Provinces will practically be of the nature of an insurance against bad years, rather than a profitable speculation in ordinary years. Can we impose an insurance rate on those who are benefited? Or is Government justified in spending great sums from the general revenues not for profit, but to save life in years of failure? These are very perplexing questions.

As regards the saving of life, the fever which has so often accompanied the canals must be taken into account. It may well be doubted whether the Ganges Canal most saves life or destroys it. Sir George Campbell had hoped that deltaic canals were free from this scourge, but he has lately seen that there are complaints of fever caused by the Godavery Canals also.

These canal questions are raised, not solved, it must be confessed, by the history of 1873.

Chapter XX gives a succinct account of the traffic and
 position of the Railways in operation, and describes the new
 Railways.

Railways undertaken or projected. The very important line through Northern Bengal from the Ganges to the Himalayas has just been sanctioned and commenced. The account of this line and other matters in this Railway Chapter will be found interesting.

Chapter XXI gives a statement of the Imperial Revenues collected in Bengal, and the Expenditure chargeable against them. An account of the management of the principal sources of revenue is also given.

There is a large falling off in the Opium Revenue as compared to the very high amount realised in the previous year, the opium crop sold having been a deficient one and the prices a fraction lower than in 1871-72. Several reforms, experiments, and inquiries in the Opium Department, are explained.

The Income Tax having been confined to a more limited class in 1872-73, and abolished at the end of that year, there is a decrease under assessed taxes.

All the other revenues are more or less progressive and prosperous.

A statement given at page 300 shows in a comparative form the consumption of, and revenue derived from, Salt, from the latter part of the last century to the present time. Taking cycles of three years the result is found to be "that the consumption of salt in Bengal increased steadily, but not very rapidly, in the first forty years of this century; increased very largely in the next few years, when the duty was reduced to Rs. 2-8 per maund, and has remained nearly stationary, or only very slightly increased, since the duty has been again raised to the rate of Rs. 3-4 per maund."

It is a subject of much congratulation to the Government that a considerably increasing Excise Revenue has been obtained concurrently with a decrease in the consumption of spirits and noxious drugs, owing to measures recently adopted. Under this head is explained the system by which a new attempt has been made to limit the liquor traffic.

In Chapter XXII a full account is given of the Provincial Finance of the year, and of the Local Taxation imposed or about to be imposed. It will be seen that, while there has not been in 1872-73 the same saving in the provincial account as in the previous year, liberal grants-in-aid of local funds have been made without disturbing the substantial equilibrium of the provincial finance, and a good balance was in hand at

the end of the year. It will also be seen that for the financial year 1873-74 somewhat more liberal budget assignments have been made, with the view of usefully and profitably expending the public works balances on works which have been thoroughly well considered, and providing the means of commencing a system of primary education of the people which has not yet been met by any local rate. All the other services were efficiently provided for within the amounts previously assigned for the purpose.

The failure of the crops of the present autumn must increase the expenses of most departments, and will bring into use the balances which the Lieutenant-Governor has thought it prudent to reserve for a bad day. But, Famine having been in the original scheme reserved by the Government of India as an imperial charge, it is hoped that increase in the ordinary departmental charges will be met from the provincial resources, even though we have relied on economies only for the means of meeting gradually increasing demands and occasional extraordinary demands such as those now unavoidable.

It has often been pointed out that in many parts of India there is now a considerable local

Local Taxation.

taxation in addition to that shown in the general revenue accounts. There has been, and is, very little of this in Bengal. In this Chapter XXII, under the heading 'Local Funds,' page 343, will be found an account of the local taxation, apart from the municipal revenues which have been already noticed. It was before shown that the municipal taxation on the inhabitants of municipalities in Bengal is but $8\frac{1}{2}$ pence per head against $12\frac{1}{2}$ pence to 20 pence in other provinces. And a statement of local taxation, which will be found at page 347, shows that the general local taxation of Bengal is at the rate of 5 pie, or a little more than a half-penny per head, and when the road cess is fully assessed, will be about a penny per head of the whole population, against $4\frac{1}{2}$ pence to 6 pence per head in the other provinces of India.

In this same chapter, under the head 'Road Cesses', page 348, will be found an

The Road Cess.

account of proceedings under the Road Cess Act, since the last report in which its origin and character was explained. It will be seen that the Act has now been introduced into twenty-one districts, in sixteen of which the valuations are wholly completed, and in two

more they are all but completed. In one district a rate for roads was imposed, and successfully collected in the past year, and in fourteen more districts rates have been imposed for the year commencing 1st October 1873, making fifteen districts in all in which the cess is now levied. All this has been done without difficulty, resistance, or serious complaint.

In one district—Burdwan—the cess has been postponed for a year on account of the fever prevailing there.

The valuations have been effected with an ease and absence of friction for which we could hardly have hoped. Neither the Lieutenant-Governor nor Mr. Schalch, the experienced Member of the Board of Revenue, who superintended the operations, and to whose tact and judgment very much of the success of the measure is due, had any idea that in this country of complicated tenures and litigious spirits the returns would have been rendered and the rent-rolls completed without far more trouble and difficulty than has in fact occurred. Bitterly as the landlord class opposed the Act, still, since it has become law and received the approval of Her Majesty's Government in England, it must be admitted that they have accepted it in a good spirit, and that there has been wonderfully little of the passive resistance which might have much embarrassed us. The officers employed have been very carefully selected and very well supervised, and the returns have been obtained quite as soon as could be expected. The whole operation has been concluded in a way which has caused little bad feeling or dispute.

When we consider the enormous complications of the tenures and sub-tenures of Bengal, and the very large number of gradations of sub-infeudations, even to the sixth and eighth degree; considering also that the measures employed were not of a stringent character, and that the time allowed for rendering returns in each successive grade was very indulgent, it is an achievement far beyond what most people had thought possible to have effected the valuation of these districts in the space of two years. It has not been sought, on this first occasion of the imposition of the cess, to push the valuation very strictly down to the very ground in every case; advantage has been taken to a considerable extent of the provision of the Act which enables officers summarily to estimate (so long as the parties do not object to the valuation) small estates and tenures paying less than Rs. 100 per annum. But over the greater part of the whole area assessed we have returns of the holding of every ryot. On the

one hand a return under the truth was very dangerous as disabling the landholder to sue for a rent higher than that rendered, and on the other a return too high involved additional taxation. There seems reason to think that the returns as a whole are a fair approximation to the truth, and that the process of valuation has altogether been a remarkable success. There has cropped up in more than one place the somewhat unexpected result that the ryots, who have hitherto suffered from the entire absence of public record or account, and have in consequence been very much at the mercy of their landlords, look on the system, by which in the valuation their rents are recorded and the zemindar is pledged to a definite demand, as one of value to them, so much so as to make it not unpopular in spite of the small burden which it involves. It is certain that in the road cess districts we have acquired a knowledge of the land tenures of Bengal such as we have never had before.

There has not yet been time to set in order and tabulate the information obtained, but measures have been taken to do so, and we shall before long be in possession of the results.

Meantime, the following very general results of the valuation of the landed property of the road cess districts may be here given.

The number of tenures of all sorts valued up to latest returns in nineteen districts, of which the registration is complete in sixteen, including sub-tenures but excluding ryots' holdings, is as follows:—

Holdings paying above Rs. 100 per annum	..	37,170
Holdings paying under Rs. 100 per annum	..	567,336

The valuation and assessments are as follows:—

	Rs.
Total assessed value of fifteen rated districts	.. 4,08,96,156
Land revenue of these districts	.. 1,28,74,192
Amount of road cess for 1873-74	.. 8,00,655

The cess is at various rates in different districts, varying from $\frac{1}{4}$ anna to $\frac{1}{2}$ anna per rupee; it averages as nearly as possible 2 per cent. on the assessed rental.

With respect to the valuations thus obtained, we must remember that, as has been said, we have not sought to press the screw as tight as might be possible on this the first valuation. We have been content to get a good approximation to a full valuation, trusting to the second valuation five years hence to render the result more exactly complete. In addition to the general disposition to understate rather than overstate values, and to the possible

under-valuation of small estates summarily assessed, it must be understood that, actual rents only being rendered, all persons classed as ryots who hold at fixed rates, have occupancy rights, or otherwise are in any degree privileged, or beneficial tenants, are assessed only on the rent they pay; not on the rack value. So far then as any ryots pay short of rack rents, the valuation is below the outside valuation.

Taking all things into consideration, we may say that probably the land which has given an assessable rent-roll of something more than three times the land revenue is probably worth four or five times the revenue, especially if we take permanently settled districts only. Three of the fifteen districts are not permanently settled, and pay a higher revenue in proportion than the others.

It may be said that there are no mines, quarries, &c., worthy of mention in the districts in which the Act has been introduced. The railways cannot be assessed without the consent of the Government of India, and that consent has not been given. Consequently the remaining immovable property liable to assessment, in addition to land, consists of houses and shops. Of these again, in the country all houses of agriculturalists and landholders who pay on the land are exempt, and all towns, with municipal constitutions, are exempt, the expectation having been that they would be taxed for their own roads under the Municipal Bill. All houses below a certain value are further exempt. The taxable house property is therefore comparatively very small, and it has not been attempted on this first occasion to assess it in a hard or strict way; rather the assessment has been indulgently confined to small towns and large villages not municipalities, but which contain a considerable number of non-agricultural houses. It has not been thought worth while or remunerative to hunt for one or two scattered houses liable to the tax in the most purely agricultural villages.

The account of the Road Cess operations in Chapter XXII explains the machinery by which the rate is assessed and administered.

Every effort has been made to make the people thoroughly acquainted with their obligations and rights, and to ensure that the money shall be fairly spent in the various localities for the common good by fair representatives of the people themselves. Judging by the absence of complaint or excitement, we may hope that the objects of the Act have been understood and appreciated.

Chapter XXIII gives carefully and fully the results of the attempts of the Bengal Government to obtain more reliable

Vital Statistics.

Vital Statistics, and furnishes especially interesting particulars of the experiment of obtaining, as accurately as possible, the deaths and births in selected areas of town and country in every district.

Chapter XXIV deals with Emigration both to the Colonies and to the Tea Districts.

Emigration.

The former has been very active in the past year, and there has been a considerable new emigration to the Dutch Colony of Surinam. The Lieutenant-Governor has been very anxious to promote free emigration to the tea districts, and he has embarked on a plan of roads leading direct from the thickly peopled districts of the West, through the districts of Bengal north of the Ganges (where there is always a demand for labour) to the sparsely populated countries of the East. Since this scheme of roads was designed a new importance has been given to the whole subject of emigration by the failure of the crops, and by the strong light in which the apprehension of scarcity places the advantage of relieving districts where the census shows the population to be excessive, and facilitating the movement of the people to places where their labour is more valuable. Plans for effecting this object are now engaging particular attention. It has been mentioned that the new Act for regulating emigration to the tea districts has been passed. It permits and facilitates free emigration either without contract or under ordinary service contracts for periods not exceeding one year.

In Chapter XXV, Sanitation, we unfortunately cannot

Sanitation.

tell of great conquests made in that science throughout the country generally, though we believe that a really great success has been achieved in Calcutta, as shown in the Chapter on Vital Statistics. The Sanitation chapter is then principally devoted to a notice of the epidemic and other scourges from which we have chiefly suffered, and of the efforts made to combat them. An account of the Burdwan fever during the past year is given in some detail. All that was in the

The Burdwan fever.

power of the Government has been done. It is hoped that the fever is wearing itself out and subsiding in the tract most affected, but it is also, it is feared, marching onwards south

into Midnapore, as well as into the northern parts of Beerbhoom. The causes of this fever are still a mystery, but renewed efforts are being made to investigate them.

Chapter XXVI, 'Medical Relief,' gives an account of the working of the various hospitals and other institutions for the relief of disease, both in Calcutta and throughout the country. Much attention has been paid to the subject, and it is hoped that several improvements have been effected and much good has been done.

Chapter XXVII shows very successful progress in Vaccination throughout large portions of these provinces.

The existing system of Education is described in the Statistical Summary under "System of Public Instruction,"

and Chap XXVIII of the Annual Report gives the educational history of the past year. The new system of Primary Education, which was not fully developed in the previous year, has now

been started with very great success, as testified by a singular unanimity of opinion. The basis of the new system is a very old one, viz. the indigenous popular education of the country. The wish of the present Lieutenant-Governor was to aid, promote, and improve this indigenous system, and to educate the people through it instead of attempting to supersede it. And it has been found that this can be done at so cheap a rate that funds which would go but a very little way under any other system will suffice for the wide spread of a useful and practical instruction. The Indian branch of the Aryan family are a literature-loving people. The Hindoos of old times were undoubtedly an educated race, and education has not altogether lost its hold among them. The village school-master seems to have been a universal institution in former days. That education formerly prevailed more than at present, may be gathered from the fact that there is now more education in the secluded, primitive, and more purely Hindoo parts of the country than in those over which the waves of conquest and so-called modern civilisation have rolled. In isolated Orissa, and in secluded parts of the Himalayas, village schools are very common, and most of the people can read and write. But in the more open and populous plains of Hindoostan (of which Behar is a part) and Bengal, which have been the seat of great empires, education has much

retrograded; the old Hindoo school-masters have been discouraged, and the people have been reduced to ignorance and subjection. In Behar and other parts of Hindoostan the Persian character and a Persianised or Arabicised language introduced by foreign conquerors has been adopted by the literate classes, and a great gulf has been placed between them and the popular language and literature. In Bengal, the conversion to Mahomedanism of the mass of the agricultural people has further disrupted the old system of education without supplying any other, for the Arabic and Persian literature are beyond the reach of simple cultivators. It has come to pass, then, that all the most populous and productive parts of these Provinces are extremely destitute of education; that in some of the most metropolitan districts the ignorance of the common people is most lamentable, (the percentage who can read and write being a mere fraction, some $2\frac{1}{2}$ per cent); and that the great Mahomedan population of Bengal is especially without the means of instruction. The ordinary Bengalee Mahomedan is, however, by race, language, and habits a Bengalee pure and simple. These men of the ordinary agricultural ranks have no prejudices against the vulgar tongue or aspirations for something more polite. Their ignorance is only due to this, that no priestly or governing powers have prompted them to vernacular education or provided it for them, while they suffer in common with the Hindoos from the general decadence of the means of instruction. The race of village schoolmasters or gooroos is still not extinct, but hitherto they have had little encouragement. The Bengal Educational Department, founded on a foreign system, has not even condescended to recognise for statistical purposes the village gooroos and their schools. The Educational Officers had not thought them worthy to be called schools; and in returns professing to give not only Government schools, but also the unaided institutions of the country, the old fashioned village schools were ignored as non-existent, and the country was made to appear even more destitute of education than it really was.

Several previous Governments have attempted to extend popular instruction, especially those of Lord Hardinge and Sir J. P. Grant, but these attempts have proved abortive; partly for want of funds, but more from the failure of the Educational Department to recognise as instruction anything that was not on their model. The consequence is that, till the last two years, the number of primary schools shown in

the returns was ridiculously small; and of the few so shown as Government primary schools, most were not truly primary, but were in fact Government schools of a higher character.

The present Lieutenant-Governor by no means depreciates modern knowledge and improved methods, but he does think that it is right that the people should be taught reading, writing, and arithmetic, at the same time that superior instruction is given to the upper classes. He would attribute an even superior importance to the former object, seeing how much it has been neglected. The indigenous schoolmasters can, at any rate, teach the children to read and write in good substantial vernacular characters, and they teach them an arithmetic somewhat different from ours, but of which the inferiority is by no means clear. The so-called Arabic numerals are really Hindoo, not Arabic; the decimal notation is in its own home in India, and many a village lad can count and cipher with a rapidity and accuracy which would put to shame many a skilled European accountant. It appeared then to Sir George Campbell that if we could widely extend this much of education, we should do very well for a beginning, even if the schoolmasters we take under our protection are themselves as yet wholly ignorant of our English system and our new educational methods. The Lieutenant-Governor thought, moreover, that if these men were to some extent subsidised, they might not only be encouraged and their number increased, but they might be tested, directed, and gradually taught the simpler portions of our methods.

The above, then, is the plan which the present Lieutenant-Governor has adopted. Village communities and individuals are invited to set up schools with Government assistance. The plan is to grant to village schoolmasters who maintain tolerably efficient schools in the native fashion and submit to a certain amount of inspection and control, a subsidy or grant-in-aid far short of an adequate salary, but which, eked out by fees and customary emoluments, may enable them to live. The grant is usually no more than from 2 to 3 or 4 Rupees per month, say on an average 5, 6, or 7 shillings per month, or a capitation allowance amounting to about as much; and at this rate a little money goes a long way. A certain sum has been allotted to each district, which the Magistrates and local Committees distribute to deserving schoolmasters who set up and maintain schools on these principles.

This scheme has succeeded beyond all expectation. Both the schoolmasters and the people have received it with a sort of enthusiasm. The people in districts which were supposed to be Beotian in respect of the absence not only of education, but of all desire for education, have suddenly shown an avidity for the instruction offered to them which could not have been anticipated. Decent schoolmasters are forthcoming in sufficient numbers to take up all the grants available, and the full number of schools of which our means admit have been already established in almost every district, or very nearly so. Both our Officers and the native public fully admit and appreciate the success of the scheme. The Educational Officers themselves, at first very little inclined to take a hopeful view of the plan, now admit that it has so far succeeded. The few objectors are only those who are wedded to the old system by which a few profited at the expense of the many. Here is a severe view on the opposition side of the question which the Lieutenant-Governor takes to be really the greatest compliment to the new system which could be had. A native newspaper, the '*Samaj Darpan*' or '*Mirror of Society*,' says:—

"The teachers of the schools established by Bhudeb Baboo (Inspector of Schools) are meeting with disappointment, while those of the Gooroo patshalas are increasing their efforts to teach imperfect pronunciation and instil defective knowledge into the minds of the young, under the patronage of Government. In many places the Goorooos are becoming very troublesome. For fear they should lose the money allowed by Government, they go out and coax lads to come and sit down in their schools without any charge. There is no instruction imparted, while at the same time a stop is put to their looking after their fathers' cows or other agricultural duties. While such is the state of things, it would appear that Mr. Campbell has directed his endeavours towards putting a stop to agriculture."

A very satisfactory feature of the new scheme is that the Mahomedans take to it just as kindly as the Hindoos. For instance, we find that of 36,997 pupils in the primary schools of the Rajshahye Division, regarding whom returns have been received, there are 18,380 Mahomedans to 18,613 Hindoos. The higher education of the upper classes of Mahomedans in Bengal is a subject beset with very great difficulties, but there seems to be no special difficulty regarding the education of the Mahomedan masses.

Arrangements have been made to establish in each district a Normal School for the Primary School teachers.

While the Lieutenant-Governor is by no means clear that our modes of teaching are better than theirs (so far as they go), it is well that an opportunity should be taken of ascertaining their qualifications, accustoming them to our ways, and showing them something of our methods. With this object they are invited as far as possible to take in rotation a short period of training or observation in the Normal Schools, and to the younger men at any rate something may be taught. It is necessary, too, to increase the number of competent teachers, in the hope that the Primary School system will eventually be much extended, and these Normal Schools serve as nurseries for the production of schoolmasters. In truth the 13,000 schools or thereabouts which our present funds have enabled us to establish (the number was above 11,000 sometime back, and it is believed that the full number is almost completed by this time) are, among so vast a population, but a drop in the ocean of ignorance, and by no means likely "to put a stop to agriculture," as the *Mirror of Society* apprehends. We have not funds to do more at present, or we should like to do very much more as soon as we can get the money and the machinery.

Need of more funds for Primary Education.

no school rate has been possible; while there has been no addition to the imperial grant for the purpose of extending primary instruction. In order to make this experiment, the Lieutenant-Governor has been able to provide in the present year about £50,000, derived from economies in other services, and he has money in hand which, if not absorbed by famine requirements, would suffice to carry on the schools for a year or two longer. Beyond that we can only trust that somehow the means will be found. An account of the situation of the educational finance question will be found in Chapter XXII (Provincial and Local Finance), page 360, under the head of Education Cesses.

With respect to English and higher education, Sir George Campbell has sometimes been represented as hostile. In truth it is not so. He has sought to increase the means of primary instruction without detracting from those devoted to higher instruction. Anxious to promote higher instruction also, he has hoped that as it progresses

Policy with regard to Colleges and higher education.

and the well established institutions become more and more self-supporting, the funds set free will become available for further extensions. He has not diminished by a farthing the allotments for higher instruction. Whatever changes he has made have only been in the direction of re-allotment and readjustment. He has sought to save something in the large sums devoted to the teaching of Metaphysics, Philosophy, and such subjects, by substituting very competent but less highly paid Native Professors for expensive European Professors, but the money saved has been devoted to obtaining Professors of Science including Agriculture and some special subjects. If he has diminished the strength of some Colleges where he thought first-class Colleges were too many, he has much increased the strength, and he hopes the efficiency, of others, especially of the Presidency College (which he has for the first time provided with a very extensive and commodious building,) and the Hooghly College. This latter he seeks to make a Civil Service and special College for Agricultural and Practical Arts as well as a place of general education. In the two great Provincial centres of Patna and Dacca he is also trying to render the Colleges as complete and efficient as possible. We have succeeded in directing more attention to the specially useful arts of engineering and medicine, and have diverted to these subjects some of the youthful native talent hitherto too much devoted to law. The Engineering College at the Presidency has of late been much extended. A new vernacular school of medicine, with several hundred pupils, has just been opened to relieve the overcrowded Medical College (said to be the largest medical school in the world), while arrangements have been made for similar schools at Patna and Dacca.

Details regarding the scientific and other teaching which has been undertaken will be found in the proper chapter.

Scientific practical instruction.

It may suffice to say here that arrangements for teaching the subjects of the alternative semi-scientific course which the University has now prescribed for degrees have been made at all the first-class colleges; while special chairs for teaching higher branches of chemistry, botany, and agriculture, have been instituted at the Presidency and Hooghly Colleges, carefully selected professors having been obtained from England by the kind aid of very eminent scientific men, to whom this Government is under the greatest obligation for their assistance.

In view to the increasing prominence of physical science and practical teaching in the higher institutions, the Lieutenant-Governor has sought to introduce an infusion of such teaching into our schools also. He hopes that arrangements, yet on a small scale, will be soon extended for introducing 'object' lessons by means of pictures and diagrams into many of our lower schools. In the middle and higher schools the teaching of Physical Geography (in the wide sense of the term) is being introduced, and Surveying is now very generally taught. This last subject has been selected as one which forms a useful link between mere book-learning and practical work, and a sort of test of ability to apply what has been taught; while it is, at the same time, an art of the utmost use not only to every one who looks to Government service, but to every one who is connected with land in a high or low degree, as almost every one is in this country.

The teaching of Gymnastics has also been introduced into our colleges and some of our schools with extraordinary success. The Lieutenant-Governor thought that exercises of this kind were of all things best calculated to supply to the Bengalee what was most wanting to him, but he hardly hoped that gymnastic teaching would be accepted with much readiness at first. It proves, however, that the Bengalee youth have shown a most ready appreciation of, and a real aptitude for, these exercises. Sir George Campbell believes that at no European school could better performers be found, and he is very sanguine that we have discovered the means of inducing these native youths to take a pride in physical energy, activity, and endurance. The Bengalee intellect is acute; these physical qualities were the great want, and if such qualities are generally acquired, the Bengalee race may have a great future before it.

For Government employment, especially, physical qualities are very important, and such qualifications have been much insisted on. There has been some disposition to ridicule the rules which require young candidates for the Native Civil Service to ride twelve miles at a rapid pace and in a successful manner, or to walk twelve miles in three and a half hours without difficulty or prostration; but Sir George Campbell fully believes that such tests are good and necessary tests, and that he cannot do a greater kindness to the natives of Bengal than by holding out to them such standards by which they may gradually fit themselves to emulate Europeans.

As regards the teaching of English, it has been a great mistake to suppose that Sir George Campbell was hostile to the spread

English Education.

of that language among the natives. On the contrary, his feeling is strongly this, that in these provinces we have as it were cut adrift from native traditions and manners as regards our official business and our higher education; it is now impossible to conduct either one or the other without English. And since that must be the medium of business and instruction, Sir George Campbell thinks it most undesirable that our choice of men should be restricted to a very limited class. In order to widen the field of selection and bring larger classes of natives within reach of Western knowledge, he would extend the knowledge of English among all who seek to go beyond the lower branches of education by every means in the power of Government. The simple vernacular languages do not supply words through which a higher instruction can be imparted. If we would avoid English we can only supply the want in Bengal by importing Sanscrit, a language almost as strange to the ordinary natives as English, and far more complicated; while in Behar the language is supplemented by Arabic brought in (through the Persian) by the Mahomedan conquerors of India. It has seemed to the Lieutenant-Governor that it is not for us to impose upon the natives of India the very difficult foreign language of a previous set of conquerors; and in Bengal he is unwilling to burden the youth of our schools with two strange languages. While therefore he would encourage and give facilities for the study of the classical languages of the East by those who would study them for literary purposes (very few they are, it is to be feared,) he has declined to allow them to be made compulsory on those who would pursue a bread-earning education in our schools, and whose wish is to learn English.

Sir George Campbell certainly inclines to the belief that, in the present circumstances of Bengal; the real vernacular (to the exclusion of an artificially concocted language) for lower education, and English for those who would go higher, is the best arrangement that can be made.

It has been said that, while the problem of educating the lower Mahomedans is simple enough, the education of the

Mahomedan Education.

higher Mahomedans is full of difficulty. A people who form a small minority in a country, and yet affect a foreign

literature of their own, radically different in its substance and its written character from those of both the rulers and the ruled, must be at a great disadvantage. Religious reasons combine with social prejudices to make the study of Arabic and Persian a necessity to these people. Already behind in the race, they are left more and more behind when English and Bengalee are the languages effective for bread-winning. All that can be done is to supply them with places of instruction where their prejudices are respected, where so much of the language they affect is supplied to them as they think really necessary, while special facilities are given to them for acquiring at the same time English and Western knowledge of a bread-winning character. This attempt the Government is now making. During the year arrangements have been made by which it is hoped to bring the Mahomedans more than hitherto within the modern system of education. On the recommendation of this Government, the Government of India has sanctioned the application of the funds of the Hooghly Mohsin Endowment to the establishment of special Mahomedan schools at several of the chief centres of the Mahomedan population, and has been good enough to supply the means of continuing at the same time on its present footing the existing Hooghly College, to which a special Mahomedan hostel is attached.

It is also proposed to improve the Mahomedan Madrissa (maintained by Government in Calcutta,) under the guidance of a competent European Principal, who shall combine Western science and knowledge with a sufficient taste for Oriental languages to bring him into sympathy with his pupils.

Arrangements for effecting these objects are now in progress.

Chapter XXIX, Literature and Art, gives what can be given on these subjects. The Lieutenant-Governor has been surprised to find from the reports of the Divisional Commissioners how very superficial as regards any direct influence over

the people is the Native Press
of these provinces and all the

The Native Press.
education and literary advance which has been yet achieved. In several great Divisions, Provinces it may be said, each containing several millions of people, not a single newspaper or periodical is published, and very few are read. In other Divisions the press is confined to two or three papers of the

humblest character and smallest circulation. It is only in Calcutta and the neighbourhood, and to some extent in Dacca, that there is a considerable Native Press; and in those places it would seem that the influence and circulation of the various publications is in the inverse ratio to their popular character. Two or three native papers published in English, and representing the upper and educated classes, have considerable position and influence. But not more than two or three vernacular papers of a higher description seem to have any great success; while the minor papers, which might be supposed to be addressed to the people, have a very small circulation. Such a thing as a really popular paper is, in fact, unknown; and we should be greatly mistaken if we suppose that anything is likely to be brought home to the people at large by the spontaneous action of the press, or that their feelings are represented by the press.

On other hand, it may be a consolation to know that the hostile criticism of the actions of Government and excessive self-assertion so prominent in many of the native papers really mean very little; and so far as they do represent real feelings, they are the feelings of a very limited class, educated by ourselves to believe that the Hindoos invented and practised everything that is great and noble, while the northern Europeans were barbarians, and consequently that the Hindoos are a very superior race only depressed by temporary circumstances. The question, however, has arisen whether some things which are published with little serious meaning can safely be allowed to be translated and republished and read by people in other parts of India, who may attach to them a more serious import. Some passages in native journals have been noticed which seem to call for interference if such things are repeated.

Setting aside the exuberance of the educated youth, and accepting the most influential part of the Press as the exponent of the views and interests of a limited class of landholders and others, it may be said that on the whole the spirit of the Bengalee Press is not really bad. If education and independence spread among the people, as they have begun to spread, it is not unlikely that we may have in time a really popular Press.

It was formerly the custom to limit the annual reports to the history of the official year, though necessarily a considerable time elapsed before the reports were compiled and

published. In the last two reports the practice has been so far altered, that while the exact returns are those for the official year, the general history of the province is carried down, as far as possible, to the time of the publication of the report. The last report for 1871-72 covered in this way some twenty months, from early in 1871 to October 1872. The present report carries on the history from that date to the present time, the end of December 1873. Thus, these two volumes may be said to give the history of nearly three years of the Administration of Bengal. The failure of the crops has now led to the absorbing occupation of the Government and its Officers in measures to alleviate the scarcity, and it is not likely that, these operations apart, much more that is new can be initiated or executed by the present Lieutenant-Governor. The two volumes then may be taken as together comprising a nearly complete account of three years of administration in which much has been attempted and something performed.

Before closing the report, the Lieutenant-Governor would express his great obligations to the Secretaries to the Government of Bengal, by whose aid all that has been done has been devised and carried out. Mr. Bernard has been in the past year, as he has been all along, an aid to the Lieutenant-Governor of the most sterling value, and to him the Lieutenant-Governor has been most especially indebted. Sir George Campbell is sure that he will be an ornament to any post which he may fill, however arduous and important. Mr. Dampier was absent for a time on other duties; but both before his departure and since his return, the Lieutenant-Governor has greatly relied on his thorough knowledge of Bengal, and most complete and earnest devotion to the public service. To him, as the Senior Secretary, much has been trusted with the full confidence of the Lieutenant-Governor. Mr. Mackenzie, who, as Junior Secretary, was entrusted with many duties, has also acted for a considerable period as Secretary, and no more useful and able assistant could be found. To him also the Lieutenant-Governor is very greatly indebted. Mr. Cotton's services in the preparation of this report have been already acknowledged.

These last lines are penned on 31st December 1873.

STATISTICAL SUMMARY.

STATISTICAL SUMMARY.

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Statistical Summary.

PHYSICAL FEATURES OF THE COUNTRY, AREA, CLIMATE, AND CHIEF STAPLES.

THE territory under the administration of the Lieutenant-Governor of Bengal comprises Bengal Proper, Behar, Assam, Orissa, and Chota or Chutia Nagpore. Its extreme limits extend from $19^{\circ} 18'$ to $28^{\circ} 15'$ north latitude, and between 82° and 97° east longitude.

The entire province thus constituting the Bengal Government is bounded on the north by Nepal, Sikkim, and Bhutan, and towards Assam the Duffla, Akha, Meeree, and Mishmee hills, inhabited by the tribes bearing those names, who occupy the lower ranges of the eastern Himalaya. On the east the boundary is less defined; the Assam frontier is bordered by the hilly country of the Abors, Singphos, Kampteas and Nagas. The friendly state of Muni pore next adjoins, and between it and the hill tracts of Chittagong, abutting the districts of Cachar and Sylhet, the hills are occupied by the Lushai and Kookie tribes, who have for many years past proved most troublesome and intractable neighbours, but with whom, as a result of the Lushai expedition, we have now established closer relations. The Arracan hills and the Naaf river complete the boundary on this side, separating Bengal from Burmah. The south is washed by the sea and embraces the head of the Bay, which derives its name from the province. At a point near to Ganjam, on the sea-coast, the boundary line divides Bengal from Madras, and proceeding northwards, verges on the Central Provinces, the independent state of Rewah, and the North-Western Provinces.

The total area of the provinces is 251,768 square miles, as given in recently corrected and readjusted returns, though some portions are still unsurveyed and only approximately determined. The Regulation and Non-Regulation districts comprise 213,507 square miles, and the Tributary States and since reclaimed territories make up the remainder.

The returns of cultivated and uncultivated areas and of (road and water) communications are not sufficiently accurate to be embodied in the present report. The extent of railways completed in 1872 amounted to 1,298 miles, as shown on the margin.

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Broadly speaking, the chief characteristics of these provinces are the plain of the Ganges proceeding from the north-west, and the valley of the Brahmaputra from the north-east, meeting in the great delta of Bengal. On the west rise the high lands of Chota Nagpore and Orissa; on the east the Chittagong, Tipperah, Garo, Khasi, and other hills; on the north the Darjeeling district is our sole possession in the Bengal Himalayas.

Bengal Proper. Behar. Orissa. Chota Nagpore. Assam.	Bengal Proper is the great alluvial and deltaic plain between the Himalayas and the Bay of Bengal, with some minor hilly tracts on either side. Behar is the upper Gangetic plain west of Rajmehal, and lying between Bengal and the North-Western Provinces. To Behar also is attached a narrow range of hills. Orissa comprises a long, flat, diluvial strip between the hills and the sea, forming one settled district, and a large hilly tract in the rear occupied by the Tributary Mehals. Chota or Chutia Nagpore is the elevated and hilly country west of Bengal and Behar and north of Orissa. Assam is the long valley of the Brahmaputra, to which several hill districts are now attached.
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The Ganges enters Lower Bengal from the North-Western Provinces near Ghazee-pore; shortly after it receives the Gogra on the north bank, the Soane on the south, and the Gunduck again on the north, at Hajee-pore—all rivers of considerable volume—and maintains a course generally easterly, but diversified with windings. The Coosee joins it below Bhaugulpore, after which the river turns the corner of the Rajmehal hills and assumes a nearly southerly direction with its greatest body of water, till the Bhagiruttee flows away on the west side to form the Hooghly, the most navigable of the many mouths, while the main stream continues south-east to Goalundo; there the Jumoon, the principal branch of the Brahmaputra, is met, and the amalgamated column empties itself by many channels into the Bay of Bengal.

The Brahmaputra, formed by the union of several great streams, enters Assam at its north-east extremity. It flows towards the south-west, through the length of the Assam valley, after which it elings to the contour of the Garo Hills, and then proceeds due southwards to its junction with the Ganges near Goalundo.

From these rivers the Gangetic delta is formed, and consists more immediately of the districts included in the Presidency division, with Moorshedabad, and Furreedpore and Backergunge of the Daoca division. Between the cultivated districts and the sea is a tract bearing the general name of the Soonderbuns, which hitherto, owing to inroads of the sea, the jungle, and wild beasts, with the unhealthiness of the climate, have baffled the enterprise of modern man.

Other rivers there are, though not of such length or magnitude. The Soorma's course is somewhat similar to that of the Brahmaputra on a smaller scale, rising as it does in the north-east of the Cachar Hills

and flowing westward, past Sylhet and Chuttuck, till it also suddenly adopts a southern turn to join the Brahmaputra and form the Megna. The Soorma valley, to the south of the Garo-Khasi-Jynteah Hills, is the high road to Cachar, and the stream affords good water carriage for the greater part of its length.

The Chittagong rivers, including the Fenny, which separates it from Tipperah, fall into the east of the Bay of Bengal, but have no connection with the water system above described. The largest of them, the Kurnafoolee, on which Chittagong is situated, rises in the highlands to the north of the Blue Mountain, and gathers the contributions of the minor hill streams on either bank. Its course is south-westerly, as determined by the conformation of the hills, and changed perpetually by the protruding spurs.

On the western side of the Gangetic delta again the rivers have little or no connection with the main system of the country. The Damoodah, the Roopnarain, and the Cossye, may all be said to join the Hooghly between Calcutta and Saugor Island, but they are isolated rivers which have sprung from the plateau of Chota Nagpore, do not help to form the delta, and are independent entirely in character.

The Sooburnreeka, the Byturnee, and the Mahanuddy, have direction generally parallel to one another and a south-easterly course, the two former rising in Chota Nagpore, the latter in the Central Provinces. The Mahanuddy is navigable for boats of a sort for 460 out of its 520 miles, and near Cuttack is about two miles in breadth in the rains.

Turning to the mountains and hills of the Lower Provinces,

Mountains. in the small part of the Himalayan chain within the jurisdiction of the Lieutenant-Governor, the elevations vary greatly, from Darjeeling 7,000 feet above the sea, on the south, to lofty Kinchinjinga, 28,000 feet high, on the north-west. Gneiss is the chief formation of the rock, while on the banks of the Runjeet river slate is found, and at the foot of the hills iron ore; moreover the presence of copper is ascertained.

The Rajmehal hills form the eastern projection of the Central Indian formation ending near the town of that name, round which the Ganges flows. They are the first connected high ground that strikes the eye of the traveller ascending the Ganges. South-west of these are broken, detached hills of considerable height, the largest of which is Parasnath, rising out of the surrounding country often in an almost perfect conical form to a height of about 4,400 feet. Many of these can be seen on the chord line between Raneegunge and Luckeeserai, and appear geographically as irregular links between the Rajmehal hills and the plateau of Chota Nagpore, which is hilly almost throughout, scantily populated, and covered with jungles over most of its surface. The extensive collieries at Raneegunge, on the confines of the Burdwan division and Chota Nagpore, furnish at present an unlimited supply of coal, which is of a moderately fair description. These regions where coal seams are abundant may generally be said to be from 1,000 to 2,000 feet above the sea. To the south of Chota Nagpore again, on the west side of Orissa, are the

Orissa Tributary Mehals, a hilly country containing a considerable population. There are forests of sal on the hills, which run parallel to the line of coast from north-east to south-west, to near the south-west extremity of the province, the Chilka lake, on the banks of which, as along the sea shore of Cuttack, much salt is manufactured.

The mountainous tract to the east of Bengal has some summits with an elevation of 11,000 or 12,000 feet, and our settled hill districts rise to 6,000 feet. They abound in coal and iron ore intermixed with limestone of excellent quality. The eastern boundary of Bengal, at the extreme north-eastern corner of Assam, is formed by a spur from the Himalayas, and from this point the hilly range is never entirely broken to the south of Chittagong. First to the north-east are the hill regions of the Singphoo and Abor tribes, then the Naga hill districts to the south of the Assam valley, continued by the Muni-pore, Cachar, and Tipperah hill to the Chittagong Hill Tracts: meanwhile the Garo-Khasi-Jynteah range strikes out parallel to the Himalayas up to the bend of the Brahmaputra; a considerable area of this high country is as yet insufficiently explored. The inhabitants are for the most part primitive in their habits, and belong to aboriginal races, of Indo-Chinese type. The jungles are intensely thick. Of the more remote parts of these hills little is known except from the reports of survey parties and such personal narratives as are depicted in Captain Lewin's "Chittagong Hill Tracts."

The Assam valley is almost a perfect flat, studded with clumps of little conical hills rising abruptly from the general level to the height of 200 to 700 feet, rich in rivers and in mineral treasures, coal of a fair class being found; the climate, too, is very favorable to the indigenous tea-plant, which grows luxuriantly. The greater part of Bengal and Behar are uninterrupted flats, subject to inundation, rich in black mould, some portions naturally more fertile than others,—the Dacca division being so fertile that it has been called "the granary of Bengal." Drawing a line southwards between Bancoorah and Burdwan, carrying it on past Midnapore and down towards Balasore, it will be noticed that to the west the ground partakes of the character of the Chota Nagpore plateau, granite being found overlaid with carboniferous sandstone, containing iron and coal in great abundance, and the climate in consequence being of a drier character.

There are no lakes of importance besides the Chilka, though there are numerous *jheels*, or shallow sheets of water, which expand or diminish owing to the season. The most remarkable are the Monda, Dulabari, and Chullum *jheels* in Rajshahy, the Aka in Jessore, and the great *jheels* in Backergunge.

CLIMATE.

Although Bengal is situated for the most part without the tropical zone, its climate is characteristically tropical. The mean temperature of the whole year varies between 80° (in Orissa) and 74° (in parts of Assam), that of Calcutta being 79°.

Temperature.

In the annual range of their temperature, as well as in point of humidity and rainfall, the eastern and western portions of the province are strongly contrasted. In Cachar, nearly 200 miles from the sea, the mean temperature of June is 82° , that of January 64.5° , and the highest and lowest temperatures recorded during five years, viz. 99° and 43° , show an absolute range of 56° only. At Chittagong, on the sea coast, the recorded range does not exceed 49° . On the other hand Patna has a mean temperature of 87.2 in June and 60.7 in January, and in 1869 the highest and lowest temperatures registered were 116.3° on the 12th May, and 36.9° on the 3rd and 4th of January; the absolute range of this year was therefore 79.4° . It is probable that some parts of Behar—the neighbourhood of Gya, for instance—experience a range somewhat greater than that of Patna.

The highest temperature recorded in Calcutta during the last 18 years is 106° , which has been reached twice only, viz. once in 1867, and again in May of the present year (1873). The lowest temperature, 52.7 , has been recorded also twice, viz. in January 1860 and 1864, and 52.8 has been observed twice, viz. in January 1857 and 1861. The extreme absolute range of the temperature of the capital is therefore a little over 53° , and the mean temperatures of December and May are 68.5 and 85 respectively. The annual rise and fall of temperature exhibits some other local variations. Thus in Orissa and the western part of the Gangetic delta December is the coldest month of the year; elsewhere the mean temperature of January is somewhat lower. This difference is due to the sea winds setting in on this part of the coast very early in the year, whereas in Behar their influence is not felt till much later in the season.

During the rains the temperature of the Hazareebaugh plateau, to the west of the delta, falls more rapidly than that of any other part of Bengal. Between May and October the fall at Hazareebaugh is rather more than 11° , while at Berhampore, under about the same latitude, it is only $4\frac{1}{2}^{\circ}$, at Calcutta little more than 3° , and even at Patna it does not exceed 8° . This peculiarity appears to be due principally to the cloudiness of the plateau in the daytime, whereby the sun's heat is rendered less intense, and to the greater radiation at night. This fact has an important bearing on the value of Hazareebaugh as a station for European troops, and as a sanatorium for invalids from the plains.

The high humidity of the atmosphere in Bengal, and more especially in its eastern districts, has become proverbial; and if the term be used in reference to the quantity of vapour in the air as measured by its tension, the popular belief is justified by observation. But if used in the more usual sense of relative humidity, that is, as referring to the percentage of vapour in the air in proportion to that which would saturate it, the average annual humidity of a large part of Bengal is sensibly lower than that of England. A comparative table is subjoined of the mean vapour tension and relative humidity of London and Calcutta in each month of the year, and the mean of the whole year; the data for the former place being taken from an essay on the

climate of London by the late Professor Daniell, those for the latter from the results of the hourly observations registered at the Surveyor-General's Office, Calcutta, and computed in the Meteorological Office of Bengal. The former are deduced from 17 years', the latter from 14 years' observations.

Mean Vapour Tension in Thousandths of an Inch.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
London ...	'245	'264	'280	'315	'340	'490	'534	'530	'468	'389	'310	'281	'376 inch
Calcutta ...	'487	'549	'695	'805	'880	'947	'954	'950	'950	'828	'605	'489	'762 ..

Mean Relative Humidity.—Saturation 100.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
London ...	97	94	89	84	82	82	84	85	91	94	96	97	89
Calcutta ...	71	68	67	69	73	81	85	86	85	78	73	72	76

The quantity of vapour in the air of Calcutta, relatively to the dry air, is then, on the average of the year, about twice as great as in that of London; but the relative humidity of the former equals that of the latter only in the three first months of the rains, which are among the driest months of an European climate.

The absolute humidity of the atmosphere is greatest on the coast of Orissa and the Soonderbuns, and diminishes inland as the distance from the sea increases. In the cold weather and spring months this decrease is rapid everywhere except in Eastern Bengal. In Cachar, however, the quantity of moisture in the air is as great as on the coast of Chittagong, and even exceeds it, excepting between the months of February and May. During the hot weather months the proportion of vapour to dry air increases steadily and rapidly in all that part of Bengal in which the hot westerly winds are not a regular phenomenon of the season; that is to say, on the Gangetic delta, in Eastern Bengal, and on the maritime plain of Orissa; but on the high ground further west, and in Behar, as well as generally in the North-West Provinces, its increase is slower up to May or June, and it then rises rapidly almost to an equality with that of the maritime region. This is clearly traceable to the winds, since in the former region winds from the sea predominate throughout the hot season, mitigating its temperature indeed, but at the same time rendering the atmosphere damper, and producing, when the air is calm, that oppressive feeling of sultriness which is so trying

to persons accustomed to the drier atmosphere of Behar and the North-West.

The districts of Eastern Bengal, including Cachar and Sylhet and the Himalayan Terai, are those of the heaviest rainfall. Their average annual fall almost everywhere amounts to 100 inches, and on the exposed hill flanks, and at their foot, even this large amount is greatly surpassed. Thus Sylhet has an annual average of 141 inches, Darjeeling 126

Rainfall.

inches, the Rungbee cinchona plantation 175 inches, Buxa fort 280 inches (the average of three years), and Cherra Poonjee the enormous amount of 527 inches; this last is the highest average rainfall hitherto recorded in the world. The rainfall is also higher on the plains of the coast than on those lying more inland. Thus Saugor Point has an average of 87 inches, and Calcutta 66; False Point 74 inches, and Cuttack 52·5. The lowest rainfall in the provinces under the Bengal Government is that of the southern portion of Behar, including Monghyr, Gya, and Patna, where the annual fall does not much exceed 40 inches, and in the case of the last mentioned station is only 37 inches. North of the Ganges it increases gradually up to the Himalaya, and on the south up to the high ridge of forest-clad country which is drained by the Soane, the Damoodah, and their tributaries. In this tract, where the monsoon winds from the opposite coasts of India meet, the fall of the few stations that have hitherto furnished registers ranges between 50 and 60 inches. In Calcutta the highest rainfall on record is that of 1871, when it amounted to 93·31 inches; the lowest (if the register can be trusted) during the last 36 years is that in 1837 (the first year of the series), when the registered fall was as low as 43·61 inches. In subsequent years the lowest falls were those of 1838 (53 inches), 1853 (52·08 inches), and 1860 (52·61 inches). In the present year (1873) the rainfall up to the middle of November has only been 44·31 inches. The Cherra Poonjee register of 1861 records a fall of 805 inches, of which 366 inches fell in the month of July alone. It is said that 150 inches have been known to fall in six days. 12 inches of rain in one day is far from unusual at Cherra Poonjee. On the 13th June 1861 an equal quantity fell in Calcutta within 24 hours. At Mozufferpore in September 1871 19 inches of rain fell in 36 hours.

By far the greater part of the rainfall of Bengal falls between the months of June and October. Showers occur also in the hot weather months, and in the months of February and March hailstorms are not unfrequent. In the eastern districts rain occurs occasionally in the cold weather months, but is less common in the Delta and the country further westward, excepting in the North-West Provinces and the Punjab. In the eastern districts and in Assam rain is more abundant in all the earlier months of the year; in April the rain sets in heavily and reaches its maximum about June or July. Further to the west the rains usually set in in June, and July and August are the months of the heaviest fall.

Except at the hill stations, and in the immediate neighbourhood of the hills, the average proportion of cloud-covered sky varies between one-third and one-half of the whole. At Darjeeling on an average the proportion of clouded sky to sunny sky is as 2 to 1. In Lower Bengal generally it is about 1 to 2, being however rather higher on the coast.

December and January are, on the whole, the brightest months of the year, but November, February, and March, are almost equally serene. June, July, and August, are the months of greatest obscurity. In the former months the proportion of cloud is on an average from 10 to 15 per cent., in the latter months from 65 to 85 per cent.

The wind system of Bengal is so often referred to as a familiar illustration of the monsoons, that it might seem almost superfluous to re-describe a subject treated of in every text book on meteorology. But it appears from recent investigations that, however well-known at sea, the character and origin of the monsoons on the land have been very generally misunderstood. The monsoons are not two undivided currents flowing to and from Central Asia during about equal periods of the year, but appear rather to consist at each period of at least two principal currents,—the one tending to or from Northern India, the other to or from the interior of China; and there are probably other minor currents originating or terminating at other centres. The Indian branch of the winter monsoon originates in the plains of the Punjab, the Gangetic valley, the uplands of Central India, and also in Upper Assam, and blows as a very gentle wind towards the two great Bays that wash the east and west coasts of the peninsula. During this season a southerly wind prevails steadily on the Himalaya at heights above 6,000 or 8,000 feet, descending lower on the western than on the central part of the range. This appears to be the upper return current of the winter monsoon, and corresponds to the anti-trade of the trade-wind region. It descends on the plains of upper India, where the atmosphere is characteristically calm at this season, and brings the winter rains, on which the *rubbee* crops depend. It is less frequently felt in Lower Bengal, where the wind is variable from north and north-west; but to the eastward, in Cachar, southerly winds are very prevalent at the winter season. In Northern India the two branches of the northerly monsoon appear to diverge towards the opposite coasts, from a line characterized by a ridge of higher mean barometric pressure, which passes from the Punjab through Benares to Cuttack. This monsoon ceases on the coast line of Bengal in the month of February, when in the lower atmosphere sea winds set in. At first these are restricted to the immediate neighbourhood of the coast, but as the season advances and the heat of the interior plains rises under the influence of the returning sun, they penetrate further and further inland, and are drawn from greater distances at sea. In the interior of India the wind becomes more westerly and blows towards lower Bengal and Chota Nagpore, not as a steady current, but as day winds, which in April and May are highly heated by the parched and heated soil, and constitute the well-known hot winds of those months. Where these two currents meet, the thunderstorms well known as north-westerns are generated. Like the thunderstorms of Europe and the dust-storms of the Punjab, they are due to convection currents, and in Bengal owe their prevailing movement from the west or north-west quarter to the strength of the land wind, which maintains its course in the upper atmosphere above the opposite

The wind system of Bengal.—The monsoons.

sea-wind, which is felt at the land surface. At this time the north-west wind continues to blow unsteadily in the south of the Bay, but calms are not unfrequent, and it is not till June that the southerly winds of the Bay become continuous with the south-east trades of the South Indian Ocean, and that the south-west monsoon, properly so called, sets in in India. This blows from both coasts, and the two branches meet along a line which about coincides with the southern margin of the Gangetic plain. Both tend towards the Punjab, the region of the greatest heat at this season, and becoming gradually drained of their vapour in their passage over the land, that which remains on their reaching the plains of that province suffices only to afford a scanty rainfall, inadequate to mitigate the temperature, and only rendering the heat more oppressive by increasing the relative humidity and diminishing the evaporative power of the air.

As an element of climate, apart from its secondary effects on the winds, and consequently on the humidity, rainfall, &c., the pressure of the atmosphere is, as far as is known at present, of subordinate importance.

Atmospheric pressure.

In Bengal, as in most tropical countries, its variation, except during the passage of cyclones, is small, scarcely amounting to an inch on the extremes of the year. The average pressure of the air in Calcutta, 18 feet above sea-level, is equal to that of a column of mercury at the freezing point, 29·793 inches in height, or to 14·61 lb on the square inch. It is highest in December, when the mean pressure similarly estimated amounts to 30·041 inches, and lowest in June and July, when it averages 29·551 inches.

The storms prevalent in Bengal are of two classes: first, those of the hot weather, already noticed, which are formed over the land, and are

Storms.

of the nature of convection currents, like the summer storms of Europe; and second, those more extensive and destructive storms that originate over the Bay of Bengal, and are most frequent at the changes of the monsoons. These latter have received the distinctive name of cyclones, and the name is perhaps as good as any other, since in them a vorticose motion of the wind is a strongly marked character, and one of great practical importance; but it is by no means a character peculiar to these storms, since it may frequently be observed in a slight degree in the ordinary north-westers; and tornados, which are apparently nearly a severe form of the north-wester, differ from a typical cyclone only in their originating over the land, in their inferior size and shorter duration. The dust-storms of the Upper Provinces also have been shewn to consist of one principal and numerous minor vortices, exactly like the larger storms of oceanic origin. The pressure of the wind in tornados, and even in ordinary north-westers, is sometimes comparable with that of cyclones, and within a limited area the former are not less destructive. There is an important difference in the character of the surface wind in these two forms of land storms. In the north-wester the violent wind usually precedes the storm, blowing outwards, and being in fact a descending current brought down by the friction of the falling rain. The centripetal currents which feed the storm are not felt at the ground surface, though they

may frequently be traced in the motions of the lower clouds. In the tornado, on the other hand, as in the true cyclone, the violent surface winds are centripetal and vorticose.

Cyclones begin in all cases over the Bay of Bengal, and the more violent and extensive storms, which alone reach the land, probably require

many days to form before they move forward from their place of origin. Some of the most destructive that have passed over Bengal have proceeded from the neighbourhood of the Andaman and Nicobar Islands. Their relative frequency in the different months of the year is shewn in the following table, which includes storms of all parts of the Bay, and those that have been felt on all parts of its coasts, Bengal included.

January	...	...	2	July	...	...	2
February	...	...	0	August	...	...	2
March	...	...	1	September	...	...	3
April	...	...	5	October	...	...	20
May	...	...	17	November	...	...	14
June	...	...	4	December	...	...	3

Of these seventy-three storms, twenty-three have been felt in Bengal or on its coasts, and all between the months of April and November, inclusive. Their course is usually north, across the Gangetic delta, north-west from the Orissa coast. The motion of the wind is in an involute spiral, revolving in a direction opposite to that of the hands of a clock, as in all cyclonic storms in the Northern Hemisphere. The greatest pressure of the wind in these storms is yet to be ascertained. The highest that has been registered in Calcutta by an Osler's anemometer is 50 lbs. to the square foot, but this was in a storm of no remarkable violence, and one which did but little injury in Calcutta. The centre of the storm at the time was passing some 15 miles to the east of the city, and the barometer stood at 28.712. In the far more severe storms of the 2nd November 1867 and the 5th October 1864 the anemometer was blown away, under a pressure of 36 lbs. to the square foot, so that no register of their maximum force was obtained. There is a prevalent impression that cyclonic storms have been more frequent of late years than formerly, but the belief does not appear to rest on any sound basis of fact. Since the destructive storm of October 1864 the attention of the public has been attracted to the subject more steadily than in former years, and many a storm that would have escaped notice, or if reported in a newspaper paragraph would have been speedily forgotten, is now made the subject of general conversation for the time, and recorded with all procurable detail in the annual meteorological reports. To this cause probably may be attributed the popular belief in the greater frequency of storms in recent years.

CHIEF STAPLES, &c.

Rice is the principal food-grain throughout Bengal Proper, and is largely cultivated and consumed over the whole of the province.

FOOD-GRAINS.

Rice.

The varieties of rice are infinite, but the rice or paddy (*dhan*) is divided into two distinct main crops, locally known as the *aos* and the

the *amun*. The *aos* rice is mostly raised upon the high level lands. It is sown with the first showers of the spring and gathered in July and September. The name of this rice (from Sanskrit अग्र, 'early') is derived from the rapidity with which it ripens. It requires more attention in cultivation than the *amun*, and is more liable to failure from the accidents of the seasons. It is not transplanted, but reaped from where it is sown.

The *amun* (देहरि, or 'winter') rice is of two principal varieties—one sown broadcast, and the other transplanted. The transplanted *amun ropa*, or *rooya dhan*, as it is called, is the commonest variety of rice in Bengal. In the first instance it is sown on high land. Afterwards, when the rain renders it sufficiently moist, and the seedlings are about a foot high, they are gradually transplanted to marshy soil, as this becomes ready for them in about 10 inches of water. This land need not be of the lowest description, but it must be such as in the rains is covered with water. The rice grows in water, knee or thigh deep. It is sown in April, transplanted in August, and reaped in November, December, and January. In some parts of Eastern Bengal this rice is transplanted twice,—first, into high dry land, where it is well manured and weeded, and then, when about two feet high, to wet marshy soil.

The *amun* sown broadcast and not transplanted varies in different localities, and has various names, but is generally known as *boron*, *boona*, or *booya*. Even this is occasionally transplanted, but not usually. It is sown in the beds of wheels and rivers, and as the waters rise the rice grows with them, and the stem at times attains the length of twelve or even twenty feet. Of all kinds of rice this is the most rapid in its growth, frequently shooting up twelve inches in twenty-four hours as the inundation rises. Some species of this *dhan* are capable of bearing submersion for seven or eight days, if the water which has risen suddenly be clear. If it be submerged in foul water, the plant dies in a day or two. This description of *amun* is sown and reaped at the same time as the transplanted species.

The *aos* and *amun* rice are known as *beali* and *sarud* in Orissa, and as *ahoo* and *sali* in Assam. In Behar the early and late crops are known as *bhadoi* and *aghani*.

Besides these there is another principal kind of rice, the *boro* or spring crop of *dhan*, raised on churs and in low wheel lands and the edges of wheels, where the water is intercepted and the plant uprooted from nurseries stuck deep into the mud during the cold weather. The crop is reaped in April, May, and June, and its success depends much on irrigation.

The above are the principal descriptions of rice grown in Bengal, but there are innumerable minor varieties familiar to the peasantry, and many of which are peculiar to particular localities.

Eastern and Central Bengal and Orissa are the principal rice-producing tracts. The *aos* crop, which produces a coarse rice, is usually consumed locally; the winter and spring rice is exported. From the whole of the Chittagong division, and, broadly speaking, from the Dacca division, there is a large export of rice. Although a great deal of rice is exported from the Dacca district, the greater part is

brought from Tipperah, Sylhet, and Mymensingh. Furreedpore does not feed itself entirely, and receives large exports from the above districts and Backergunge. The Backergunge outturn of rice is probably larger and better than that of any other district in Bengal. From the Soonderbuns of Backergunge, Jessore, and the 24-Pergunnahs, there is a very large supply. In the Rajshahye division also the cultivation far exceeds the requirements of the people, and rice is largely exported. Dinagpore is the principal rice-producing tract in the division. From the Maldah and Dinagpore districts the export up-country registered at Sahibgunge amounted last year to 1,500,000 maunds, from the Rajshahye district 320,000 maunds, and from the Moorshedabad district about the same amount. From the Dacca division the up-country export registered at the same place was more than 400,000 maunds. The Bogra rice export is estimated at 600,000 maunds; Rungpore is not yet an exporting district, though there is a surplus cultivation; the proposed Northern Bengal Railway will doubtless remedy this. While Moorshedabad exports largely from the west of the district, it receives large imports into the east from the districts on the other side of the Ganges. In the Burdwan division there is a surplus cultivation of rice in Midnapore and Beerbhoom, and a large export. The export from Midnapore is estimated at 1,700,000 maunds annually. From the Bhaugulpore division the cultivation of rice is not much more than is required for local consumption. The produce is inferior. Occasionally exports are consigned to Behar and the North-Western Provinces. In the Purneah district there is, however, a surplus, and rice finds its way in quantities to Darjeeling, and also into both the Calcutta and up-country markets.

In Orissa there is a large rice cultivation, and the exports are considerable.

The principal inland imports of rice grown in the interior are into Calcutta for export by sea, and into the Behar provinces. Large quantities are also sent into Assam. Bancoorah, Hooghly, and Nuddea, are the principal Bengal importing districts.

The amount of rice exported from Calcutta annually exceeds 10,000,000 maunds. There is a considerable sea export also from Chittagong.

In Behar also rice is a main staple of food, though where the soil is high and dry one of the two daily meals is usually made of wheat, maize, peas, or inferior grain of some sort. Maize and barley are perhaps cheaper than rice, but rice is the favorite food, and those who can afford it take it twice a day; those who cannot, once; but only the very poorest, if even those, eat no rice. It may be roughly stated that in Behar ordinary cultivators eat their meals half rice and the other half in cereals, millet, or pulses.

Murwa and *kodo* are both cheaper than rice, and are much eaten by the lower classes. *Kodo* is a millet, the size of a canary seed; each plant

Murwa.—*Kodo*.

has a longish ear, longer and thicker than an ear of corn, and containing about an egg-cup full of grain; it is eaten boiled like rice, or sometimes in *chupatties*. *Murwa* is a very cognate grain to *kodo*, but

it grows in bushy tufts, and not in gracefully pending ears, as *kodo* does. It is a staple crop in Gya and in the Chota Nagpore division.

Barley (*jao*) is generally eaten in the form of *sattoo*, with some salt and chillies or other condiment. In Tirhoot, Gya, and elsewhere it is said to be the cheapest of all the food crops. What is called *sattoo* is made from many grains,—from wheat, peas, maize, gram, pulses, as well as barley; the seeds are parched and then ground between coarsely ribbed grindstones. It is eaten in the same state as it comes from the grindstone, having been cooked in the drying; a little water is merely mixed with it. Barley is also ground with *keroo*, *khesarce*, or other *dál*, and baked into *chupatties* or bread. It is sometimes boiled like rice.

Makai, maize, or Indian-corn, can, when it is in season, be purchased as cheap as barley, but not so all the year round. It is prepared and eaten like barley. From Patna and Shahabad it is reported that maize is even more consumed than barley by the labouring classes. Generally speaking, however, the *makai* crop is not nearly such an important item in the districts north of the Ganges as it is in the south.

The pulses, condiments, and vegetables of Behar, are much the same as those consumed in Bengal.

In Bengal Proper the millets *cheena* and *kaon* are cultivated and consumed especially in the eastern districts. They are raised in the low lands after the rains, and reaped in March and April. *Bhoora* is a coarse grain seed which is eaten by the poorer classes.

Although boiled rice forms the principal article of diet (and among Bengalees is often the only food eaten), *dál*, fish, vegetables, oil, salt, spices, and other condiments, are added to give it a relish.

The principal pulses or *dál*, which enter most largely of these into the consumption of food, are known as *muttur*, *khesari*, *mashuri*, *maskolai*, *moog*, *boot* or *chola*, and *arhur*. All these except the last are sown after the subsidence of the rains and reaped in the cold weather, and are extensively cultivated. *Muttur* or peas, in particular, is in great demand, as its *dál* is much relished by the people. The well known *arhur* is sown with the *aoos dhan*, usually in the same field, and is reaped in Pous. It will grow almost on any soil; the wood is sold as fuel. Pulses or leguminous grains are largely exported eastwards from the western districts of Behar and elsewhere.

Either in a cooked or raw state, vegetables, *turkari* of some sort, form an invariable part of the food of the people of these provinces. The most common and important is the egg-plant or *brinjal*. It yields two crops in the year. This vegetable is daily used by every man, high or low, in the Lower Provinces, and is cultivated in almost every garden. Ryots, such as the caste of Pooras, who earn a livelihood by the sale of vegetables, set apart whole plots of land for its cultivation. *Koomra*, or the *Belattee koomra*, as it is called, comes next in order. The ryots

are so fond of raising these gourds that their creepers may be found in every house, either climbing on the thatched roofs of the houses or trailing on bamboo stages made for the purpose. There are an infinite variety of gourds, tubercous roots, and other vegetables consumed by the natives under the general denomination of *turkari*. Cauliflower (*phool kabi*), cabbage (*kabi*), are common; garlic (*roshun*), radish (*moolu*), *sag*, of sorts, and onions (*piyaj*), are universal. For many there is no English equivalent. The ryot's vegetable garden is always near and about his homestead.

The cultivation of potatoes (*Belattee aloo*) in these provinces is yet very inconsiderable. They are grown to some extent in the district of Hooghly, but are not of a very good quality. From the north-west parts of Dacca they are procurable. In most parts of Bengal, however, although yams and some sorts of sweet tubers are not uncommon, the cultivation of the potato is unknown. In Assam and Darjeeling the introduction of this staple has been more successful. It is found in the Khasi Hills that the potato is the most remunerative of the staples there cultivated, and there is a tendency to increase the cultivation. From recent inquiries it appears that the outturn of potatoes in these hills is about 185,000 maunds, of which about 155,000 maunds are exported, and the remainder retained for seed and local consumption. Cherrapoonjee potatoes always command a ready sale at the larger stations in Bengal.

Great also is the variety of condiments with which the ryot seasons

Condiments.

his food. Amongst a community addicted to fish, turmeric (*huldee*) is extensively used in curries and in all sort of vegetable and animal food: ginger (*adruk*) is also eaten in animal food, and is sold as medicine. Coriander (*dhania*), black cummin (*randhooni*), and aniseed (*joan, mouri*), are grown in small quantities for local consumption. Chillies (*lanka morich* or *jhal*) are cultivated in the western districts of the province, and in large quantities in Dacca. They are the principal cold weather crop also in the Chooadangah sub-division of the Nuddea district, where the whole country from the railway will be seen covered with the red ripening fields, and are largely exported to Calcutta. The *peepool* or black pepper is a condiment under careful cultivation. The creeper is planted in the beginning of the rains, and as it grows in shade the seeds of the stout *dhonicha* hemp plant are sown near the lines, which, as they grow, afford shelter to the creeper.

The annual exports of turmeric from Calcutta are about 50,000 cwts., and of ginger 10 to 20,000 cwts. The export of turmeric last year was very much below the average.

The cultivation of *pân*, or the betel leaf, is extensive everywhere.

Pân.

It is a creeper and cultivated in gardens under cover, which are styled *boroz*. The caste of Barooes have the exclusive monopoly in the cultivation of the plant. The crop is sown on high land, which must be free from inundation. Each garden lasts for a few years only, and the first green leaves, especially those plucked in the early spring, are said to be preferred by those who indulge in the luxury.

The *supari*, or betel-nut, is also common in Eastern Bengal, especially in Tipperah, Backergunge and Dacca, and is very profitable to the proprietors of land. It bears fruit in the eighth year, and is most productive from that time to the sixteenth year, when the produce falls off. The nuts are gathered in November.

Supari.

It is not necessary to do more than allude to the fruit produce of the country. Plantains and mangoes are to be found everywhere; the jack tree is abundant.

Fruits.

Many parts of Eastern Bengal are studded with cocoanut plantations. Maldah has acquired a special pre-eminence for its mangoes, Sylhet for its oranges.

The most important commercial staple in the country is jute (*Corchorus olitorius* and *C. capsularis*), known in Bengal as *pdt* or *kosta*, the two words being used indiscriminately to denote the same thing,—sometimes

COMMERCIAL STAPLES.

Jute.

together (*kosta pat*), sometimes separately. The plants attain a size that allows fibres of 12 feet in length to be separated from them. The fibre is long, soft, and silky, and attention has been called to it as a substitute for flax; but the great trade and principal employ of jute is for the manufacture of gunny for bags, bedding, cordage, &c. The wonderfully rapid increase in the quantities exported sufficiently indicates the extension of the cultivation from year to year.

Twenty years ago the jute cultivation in Eastern Bengal was just what the tobacco cultivation is at the present day; that is, if the ryot had any spare land he grew a small quantity for his own use. He was ignorant of the suitability of the soil to the crop, and as the demand was very small, he did not think it worth his while to make experiments on any large scale. By-and-bye the large churs thrown up by the great rivers, and the increased demand for jute in Calcutta, opened his eyes, and the plant now forms the staple produce of the country next to the paddy.

Not only high, but also low lands, are adapted to the growth of the jute; the only thing for consideration being that there may be no water when the plant is very young, but after it has once risen to about 1½ feet high no quantity of water can injure it. The crop is sown in April and cut in August. The jute cultivation has been a great relief to the ryot. It is his resource during a calamitous year for paddy, and enables him to lay up something annually for bad times. The cultivators, after clearing and drying the jute, sell the fibre to the *faria* or *paikar*, who frequents the local *hâts* and villages for the purpose of making purchases. Then he takes to the *mahajun* or wholesale dealer, who has either advanced to him money for the purchase or gives him a profit on the quantity he has brought in. Then the small bundles are broken up and the fibre is again dried and rolled into huge circular bales, in which form it finds its way to Calcutta before transhipment. By steamers alone 1,508,900 maunds of jute were exported from Serajunge, the principal mart in Eastern Bengal. It is probable also that at least twice this amount was exported in country boats.

In Eastern Bengal, which is the great territory of jute cultivation, the increase and progress of the cultivation have been steady up to the past year. Last year's crop was by far the largest that had ever been known. The area under cultivation was greater than in any previous year, and it was estimated that in the district of Mymensingh alone the outturn exceeded two millions of maunds. Unfortunately this excessive cultivation made necessary the employment of hired labour to assist in preparing the fibre, and the prices of the market fell at the same time so low that the fibre in many places cost the producer more than could be got from the produce. It is said that in some places the prices that were obtainable would not have covered the expense of preparation and transport, and the plants were allowed to rot and die where they grew, but it is probable that such cases were exceptional and peculiar. A much smaller area has been sown with jute in the present season of 1873. It may also be added that the local consumption of jute where there is or is not export is everywhere large. The ryots will always grow as much as is required for their domestic purposes, for keeping their huts in repair and tying their cattle; while if there is a surplus it will always find a ready sale at the nearest market, where there must be considerable demand in a country which abounds in mat and bamboo houses that have to be tied together. Where jute is not grown for export, it is cultivated in a little plot about the ryot's own homes, like tobacco or vegetables, or on a deserted homestead, or, it may be, for the convenience of steeping it, on the neighbouring bank of a dull, sluggish stream.

The districts in Bengal which grow jute most largely are Rungpore, Mymensingh, Bogra, Dacca, Pubna, Dinagepore, Hooghly, 24-Pergunnahs, and a portion of Goalparah. The jute of very best quality is grown in Rungpore, Goalparah, and some parts of Mymensingh. The staple is also grown, more or less, over most parts of Bengal Proper, but not at all in the frontier hills or the dry districts of Behar. In Orissa the cultivation is very slight, and hardly sufficient to meet the demands of local consumption.

The export of jute, including cuttings and rejections, has increased from 25,13,690 cwts. in 1863-64 to 70,61,937 cwts. in 1871-72. The export of gunny cloth amounted in 1872 to 106,624 pieces, though this was far below the average of previous years. In addition to this there remains the very large quantity of jute kept for local consumption. In the sub-division of Atteah, in the district of Mymensingh, it is said that jute is manufactured into paper, so that would seem to be no new discovery after all. It is well known that *mesta*, a sub-order of the jute plant, has long been used for the manufacture of native paper.

Sunn (crotalaria juncea).—This is not the true hemp, though it is known in the trade and is exported under the name of *sunn* hemp. It is

cultivated and raised principally by the fishermen caste, and its chief local use is in the manufacture of nets and cordage for boats, &c. A considerable quantity of this fibre is made into lines and shipped to Australia. The cultivation of this plant has considerably increased within the last few years.

The Jubbulpore hemp (*crotalaria tenuifolia*) is suited to dry and hilly tracts, but in Bengal it has been found that the fibre loses strength.

Dhunchee or *dhunecha* (*sesbania aculeata*) grows in low, wet soils, to the height of from 10 to 12 feet, yielding fibres from 6 to 8 feet in

Dhunecha.

length, but they are coarser and more harsh than those of hemp. It is considered, however, to be more durable in water than either *pât* or *sun*, and is much used by fishermen for drag-ropes to their nets. It is a hardier plant than jute. It is believed that the fibre of this plant is never exported, although reports of its sample have been very favorable.

Ganjah (*cannabis sativa*), the true hemp, is not cultivated in this country for its fibre, though it is largely cultivated for the sake of the intoxicating

Ganjah, or hemp.

drug manufactured therefrom, and for the sake of the leaves, which are smoked and cause intoxication. Experiments have frequently been made to ascertain whether the cultivation of this plant for its fibre would answer in this country, and not without success. In fact superior fibre, deserving of the first attention, has been produced. But the preparation requires great care, and the cultivators, while they can make a certain profit by cultivating the plant for the drug, will not take the necessary trouble for the sake of the fibre. To produce the drug the seed is sown thin, whereas for fibre it should be sown thickly, as *sun* and jute are sown. It is doubted, however, whether country seed would produce a staple of any length.

As an exciseable product *ganjah* is of the very greatest importance. Its cultivation is at present confined to a single tract of land lying on the north of Rajshahye, to the south of Dinagepore, and to the south-west of Bogra. The reason of this has not been explained, but the fact of its continually spreading to the north and east is an indication that it is not necessarily limited to this narrow space. *Ganjah* is also grown in the Tributary Mehals of Orissa, but it is of an inferior description, and finds no favour with the smokers of Bengal. The seeds of *ganjah* are sown in August, and the harvest is reaped in January.

The value of *ganjah* exports from Rajshahye is now estimated at two lakhs of rupees. Thirty years ago the value of the export was only Rs. 40,000. The weight of *ganjah* exported from the district in 1871-72 amounted to 12,308 maunds.

Mushina, মশিনা (*linum usitatissimum*), the *teese* and *ulsee* of the

Mushina, flax or linseed.

North-West and Behar, is the common flax, but is never grown in this country for fibre, but only for the seed for making oil. The experiments, however, that have been made show that the culture for fibre is not only possible, but likely to be most successful. The damper districts of Bengal are not well suited to this plant, but south Bhaugulpore, Monghyr, Patna, and Shahabad, are all districts in which the flax plant might be successfully cultivated for the fibre, and is extensively cultivated for its oil.

Oil-seeds indeed are very largely grown over the whole of Bengal and poured from all parts of the country into Calcutta. The largest cultivation is along the banks of the Ganges, and especially in the

Oil-seeds.

districts of the Patna and Bhagulpore divisions and in Assam. The registration of river traffic effected at Sahibgunge showed that about one-half of the oil-seed that came down the river, or nearly 1,300,000 maunds, came from the Patna division, and about 900,000 maunds from the Bhagulpore division. The largest shipments of oil-seeds are made from Revelgunge in the Sarun district, at the meeting of the Ghogra and the Ganges. From this mart alone more than 500,000 maunds of oil-seeds were despatched, and even this large figure is considered by the Collector to be below the mark, as from eight to nine lakhs of maunds are annually sold at that place. The next largest oil-seeds mart was Roshra, a comparatively little known place on the Chota Gunduck river, in the Durbhanga sub-division of Tirhoot. From Roshra 345,000 maunds of oil-seeds were despatched; while Durbhanga and Somastipore, two other towns in the Tirhoot district, sent about 100,000 maunds between them. From the marts of the Patna division, on the south of the Ganges, comparatively little oil-seed was despatched. Patna sent 200,000 maunds; but from other places in Patna or Shahabad not more than 30,000 maunds were despatched. More than four-fifths of the oil-seeds passing Sahibgunge were consigned to Calcutta, or to places on the Bhagirutty, which feed the Calcutta market.

From Serajgunge, in Eastern Bengal, there is an annual export of about 200,000 maunds of oil-seeds.

The principal oil-seeds in the country are *sarsoo* (mustard), *teel* (sesamum), and *teesee* or *mushina* (linseed). The white and dark-red species of mustard and linseed are in many parts of Bengal the staple produce of the cold weather crops. They are sown in October and November and reaped at the close of the winter season; *sirgoojah* or *sooar goozee*, and *tara goozee*, are oil-seed crops cultivated and reaped at similar seasons. Of all descriptions, mustard oil is the most largely consumed and most relished. It has been remarked that the cultivation of this crop is increasing. Poor lands, and lands recently reclaimed from jungle, are generally sown with it; the yield being considerable in comparison with the small amount of labour devoted to cultivating and preparing the land. It is usually sown on indigo lands in Bengal.

The usual export of linseed from Calcutta is now about three million cwts. The exports of rape-seed, teel-seed, poppy-seed, and other oil-seeds, are comparatively insignificant.

Throughout the hills of the northern and eastern frontiers of these provinces, including the newly acquired Garo territory, cotton is a most important

Cotton. staple. All along the ranges surrounding Assam, and lying between Assam and Sylhet, such as the Garo, Meekir, Khasi, Jynteah, Naga hills, and again between Sylhet and Cachar on one side and Chittagong on the other side, as the Tipperah, Looshai, and Kookee hills, as well as among the Chittagong hills, the cultivation is of much the same character and extending in area. There is also some cotton in the western hills. In the plains, on the contrary, the production of cotton is an inconsiderable industry, and nothing is exported, while much is imported from the North-Western Provinces. The crop takes kindly to the soil in some parts of the Burdwan division; in Orissa there is a growing cultivation, and a great probability of the produce being benefited

by irrigation; but even in Behar, where the cultivation is comparatively most extensive, no indigenous cotton is exported, as the crop grown is not sufficient for the requirements of the people, and has to be supplemented by a trade in cotton imported by land or river from the north-east, and by an increasing importation of English piece-goods by sea. There is an enormous importation of English cotton piece-goods into every district in Bengal. The valuable export of raw cotton, of which about four millions sterling in value annually leaves Calcutta, is received from Western India.

The cultivation of the date tree, and the manufacture of date sugar,

Date sugar and goor.

are very extensively carried on in the deltaic districts of Jessore, in part of Nuddea, in the sub-divisions of Busirhât and Satkhira, in the 24-Pergunnahs, and to some extent in Furrædpore. It is a popular and profitable cultivation for the ryots, who grow the trees in clusters about their houses, on the boundaries of their fields, and occasionally in large open gardens occupying broad areas of land. The juice is extracted from the trees during the cold season. It has been estimated that after deducting expenses the ryot clears a profit of six annas per tree, besides the advantage he enjoys for raising a cold weather or rice crop in the ground occupied by the date garden. A tree yields five seers a season, and may go on yielding for 20 or more years. As many as 100 trees are frequently planted in a beegah of land. *Goor* and date sugar are enormously consumed in the districts of their manufacture, and yet are freely exported also. It has been ascertained, for instance, that in the sub-divisions of Jhenidah and Magoorah, in the district of Jessore, 391,780 maunds of *goor*, and 137,000 maunds of date sugar, were manufactured in the present year (1873), of which nearly 50,000 maunds were sent down to Calcutta.

The genuine sugarcane plant in these localities has been fairly driven out by the date, and is now languishing. It is, however, largely

Sugarcane.

cultivated elsewhere in Bengal and Behar. Excellent varieties have been imported and tried with success from the Pacific Islands and the West Indies, but the progress of their growth has been injured by the recurrence of a blight. A similar account of this deterioration is received from Rungpore and Hooghly. The country qualities are of a very moderate description. Sugar is largely produced in the north-west of Bogra, in the east of Dinagepore, in the Bograi Pergunnah of Midnapore, in Furreedpore, and in Behar, principally in the district of Arrah. There is a large local consumption everywhere, and the exports and imports are not relatively large. It may, however, be noted that 555,000 maunds of sugar exported from Benares and Behar were registered last year at the Sahibgunge registering station. Rather more than 500,000 maunds are annually exported from Calcutta.

With the exception of Rungpore and the Dooars, and a part of Tirhoot and Purneah, there is hardly a district of Bengal in which tobacco is

Tobacco.

sown for trade and export. Tobacco is, however, universally grown to a certain extent for local consumption. The ryot takes up a small plot of land at his homestead near his cow-house, for the convenience of manuring the land, as he always, if possible, manures his tobacco crop.

In Baraset and elsewhere, where indigo cultivation has been extinguished, tobacco has been found to thrive well on the old indigo lands, and may be seen planted up to the very edge of the ruined vats. Tobacco is reared in a nursery in October, transplanted in November, and becomes ripe in March and August. The Rungpore, or *Kochar* tobacco, as it is called, is imported all over Eastern Bengal, and a not inconsiderable quantity leaves the country and goes to British Burmah. It is exported by the Mughs and Chittagong merchants and from Calcutta. As evidence of the excellence of the Rungpore tobacco, it is gratifying to note that a medal was obtained by a native of the district for a specimen which he exhibited at the Paris Exhibition of 1867.

Tea is cultivated to a greater or less extent in the five divisions of

Tea.

Assam, Dacca, Cooch Behar, Chittagong, and Chota Nagpore. The records of the different district officers show that the area of waste land at present held by persons connected with the industry is 804,582 acres, and that out of this area 70,341 acres are actually cultivated with tea; but this is probably an under-estimate. The outturn of this acreage is shown by the same authorities at only 14,670,171 pounds. From the Calcutta Trade Returns it appears that the total yield last year exported by sea was close upon $17\frac{3}{4}$ million pounds; in 1871-72 it was $15\frac{1}{4}$ millions. It is estimated that the total manufacture during the present season will be $20\frac{1}{2}$ millions. There is every reason to believe that the Calcutta estimates approximate to the truth more nearly than those given in the district reports. There is also a growing consumption of Indian tea in India exclusive of what is exported. These results are most encouraging when it is recollected that it is only twelve years since that the annual outturn of tea did not exceed one million pounds.

At the head of the divisions comes Assam, in which tea is grown in five districts—Seebaugor, Durrung, Lukhimpore, Nowgong, Kamroop. The total area taken up for tea planting is stated to be 364,990 acres, and the amount cultivated to be about 30,000 acres, or not more than eight per cent. The produce of tea during the year 1872 is estimated by district officers to be 6,150,764 pounds, of which 1,500,000 were produced by the Assam Company. Next to Assam comes Dacca with two tea-growing districts, Sylhet and Cachar. The amount taken up for tea is about 200,000 acres, and the cultivated area 26,751, or about 13 per cent. of the whole acreage. The outturn of this division, according to the same authorities, is about $5\frac{1}{2}$ million pounds. Next to Dacca in importance as a tea-growing division is Cooch Behar, with two tea districts, Darjeeling and Gowalpara. The total area taken up is 133,024 acres, of which 14,639 acres, or about 11 per cent., are under cultivation. The outturn of the division for 1872 was said to be about three million pounds.

In the Chittagong division there is only one tea-growing district, Chittagong itself. About 24,000 acres are taken up, of which 2,203 are cultivated. The outturn for 1872 is given in the district returns as 204,112 lb.

The tea cultivation of Chota Nagpore is very unimportant, though there are gardens in two districts, Hazareebaugh and Lohardugga. The total cultivation is 894 acres, of which the outturn for 1872 is stated to have been 53,200 lb.

In Mymensingh there is a single tea garden of 88 acres, and the produce in 1872 was 6,400 lb.

The head of all the districts in cultivation is Cachar, with an outturn of nearly 5 million pounds. (The quality of the Cachar tea is also thought by some to be the best.) Then comes Seebaugor, with an outturn of more than 3 millions, and Darjeeling with about 3 millions. Lukhimpore, Durrung, Sylhet, Nowgong, Kamroop, and Chittagong, follow in the order indicated.

The average yield per acre calculated upon the entire cultivation is said to be about 208 lb. This amount, though falling far short of the sanguine expectations of the first days of tea planting, is amply remunerative, and the prices now obtained show that the average quality must be very good. It is unquestionable indeed that the industry is in an infinitely better and safer position now than it was ten years ago. The cultivation has enormously extended, and the gardens are as a general rule well filled with plant, highly cultivated, and carefully managed. There is every reason to hope that the labour difficulty is disappearing in Cachar, and in spite of the complaints from Assam there are evident signs of improvement in that province. In Darjeeling also the labour question becomes more easy of solution. The tea industry is in short, in spite of occasional anxieties, now evidently prosperous, and, it may fairly be anticipated, is entering on a period of stability such as it has not yet experienced.

The production of indigo is a principal industry in these provinces.

Indigo.

In the districts of Nuddea and Jessore, in the Lower Provinces, over Central Bengal, in Purneah, and westward throughout Behar, north of the Ganges, indigo is largely cultivated, and from its mode of cultivation is in many places the most important article that engrosses the attention of the people. Although in Bengal proper the area of indigo lands is much reduced, in Behar it has increased, and the total annual outturn and export of the country is now hardly less upon an average than it was thirty years ago. The average may be said to be about 100,000 maunds, valued at two millions sterling. A statement showing the total exports of indigo from Calcutta for the last thirty years, furnished by the Custom House, is subjoined:—

Years.	Quantity.	Value.	Years.	Quantity.	Value.
	Mds.	Rs.		Mds.	Rs.
1848-49	1,80,228	8,19,16,914	1858-59	84,212	1,74,58,771
1849-50	1,29,468	2,85,05,503	1859-60	98,142	1,84,02,046
1850-51	1,04,178	1,94,88,896	1860-61	1,00,364	1,80,75,111
1851-52	1,00,747	1,80,88,846	1861-62	98,710	1,08,98,008
1852-53	92,334	1,40,24,414	1862-63	98,1268	1,55,86,740
1853-54	1,24,010	1,87,76,777	1863-64	83,270	1,23,80,475
1854-55	1,08,184	1,87,58,728	1864-65	92,558	1,48,84,724
1855-56	1,08,162	1,71,78,836	1865-66	94,704	1,80,01,271
1856-57	1,17,004	1,82,18,896	1866-67	1,01,884	1,88,81,786
1857-58	89,691	1,42,88,481	1867-68	86,464	1,88,14,248
1858-59	1,07,868	1,70,12,080	1868-69	98,920	2,21,27,244
1859-60	88,341	1,42,07,808	1869-70	88,080	2,28,68,928
1860-61	1,23,552	1,87,84,900	1870-71	86,473	2,28,68,028
1861-62	98,151	1,47,86,431	1871-72	91,179	2,40,86,761
1862-63	83,801	1,84,86,121	1872-73	1,62,860	2,70,40,804

In the Chittagong division, in Orissa, Chota Nagpore, and Assam, no indigo is sown. Vats have been opened in Orissa, but the cultivation did not succeed, and they fell to ruin, although it is said that a plant very like indigo grows wild in some of the tributary estates. In Dacca also indigo has very recently (since Messrs. Wise and Brodie closed their factories) ceased to be a crop of much importance. There are now only two factories at Dacca belonging to a European company, and a small concern belonging to a native zemindar in Mymensingh. There is a small cultivation in Furreedpore, with an average outturn of about 400 maunds. Twenty years ago this was one of the principal indigo tracts in the country, and the produce was from three to four thousand maunds.

In the jungly tracts of Midnapore, in the Burdwan division, superior indigo of first rate dye is produced. The outturn is calculated at 1,800 maunds, valued at four lakhs and a half of rupees. In the other parts of the division, however, the industry does not prosper. In Hooghly indigo manufacture is extinct, although fortunes were formerly made in the factories which are now falling to decay; and though the *churs* of the Bhagirutty and Hooghly present an admirable field for indigo cultivation, and are otherwise little profitable, no one seems disposed to try it again. There are still a few small factories in Burdwan, Beerbhoom, and in Bancoorah, but indigo cannot be made in these districts of sufficient quality and quantity combined to make it a very remunerative enterprise.

Indigo is grown largely over the Moorshedabad, Maldah, and Rajshahye districts of the Rajshahye division, and to a less extent in Pubna and Rungpore. The constant changes all along the river Ganges supply ample alluvial soil well suited for the crop. In the little district of Maldah there are upwards of twenty working factories belonging to some seven different concerns, and the average outturn is about 2,000 maunds. In Moorshedabad the outturn is above 3,000 maunds from twelve concerns. From Rajshahye, with three concerns, the produce is about 1,000 maunds. In Pubna and Rungpore indigo is a failing industry as far as the connection of European capitalists with it goes. From Pubna the outturn may now amount to 450 maunds, but in past years it was a principal indigo-producing tract.

Indigo is also grown and manufactured throughout the Bhaugulpore division; extensively in the Regulation districts, and moderately in the Sonthal Pergunnahs. There are six concerns in Monghyr, some of them large, and the outturn of that district is not less than 4,000 maunds. In Purneah there are twenty concerns, with an average produce of 6,000 mannds. From Bhaugulpore, the outturn is about 3,500 maunds, and there are eighteen concerns.

In the 24-Pergunnahs district of the Presidency division indigo is now extinct, though but a few years ago there was a large cultivation, especially in what is now the sub-division of Baraset. In Nuddea and Jessore, on the contrary, although the cultivation has much decreased, and numerous factories have been closed, the indigo industry is still of the very first importance. The average outturn is not short of 10,000 maunds annually, while the quality of the dye is of the highest order and

equal to its old reputation. There are twenty-four concerns in Jessore, of which all the most important, as elsewhere, are the property of Europeans. The value and quantity of European indigo is out of all proportion compared to the native-made indigo; and although out of 99 factories in this district as many as 48 are worked in the interest of Bengali landholders, they are severally of no importance. In the Magoorah and Jhenidah sub-divisions, where indigo flourishes most, there are 67 factories, with an area of 76,000 beegahs, under cultivation, and an outturn of something less than 5,000 maunds. In Nurail, the outturn is about 500 maunds; in the Khoolna and Sudder sub-divisions it is less than 100 maunds. The whole produce of the Jessore district averages from 5,000 to 6,000 maunds. In Nuddea the principal cultivation is in the Chooadangah and Meherpore sub-divisions. There are a great many native factories in this district also, but they are of little or no importance. The average produce of Nuddea is about equal to that of Jessore.

The indigo from Behar—Tirhoot indigo, as it is generically called—yields about one half of the produce annually exported from Calcutta. It is difficult to calculate the amount of capital invested in the province, but it is very large indeed. In a commercial prospectus circulated with a view to establishing a bank for Tirhoot, it was calculated that the annual outlay was about £600,000, a calculation which must be considered to refer to several of the Monghyr factories, which draw their supplies from Tirhoot, as well as to the majority of the Sarun and Chumparun concerns. Add to this the reserve fund necessary to meet bad seasons, and the capital of those persons who have lent money to planters, together with the value of stock and other items of fixed capital, and the total capital interested in the business in the northern districts cannot, it is estimated, be less than £1,000,000, and is probably more.

The cultivation is almost entirely to the north of the Ganges; to the south it is very small, and indeed in Gya and Patna the business is scarcely worth mentioning. In Patna the industry is anything but successful. Three natives have set up some isolated vats, from which it is estimated that the whole annual produce may be about 70 maunds. There are nine petty concerns in Shahabad, which yield a poor crop, varying from 300 to 600 maunds. There is only one indigo concern in Gya with three out-factories, from which the average indigo outturn is 450 maunds. Owing probably to the drier climate and less favorable soil, the dye is as a rule inferior to that of Tirhoot, and consequently it brings a lower price. Frequent droughts cause the crop to be an exceedingly precarious one, and smaller profits realized in the best seasons by the planters, owing to the inferiority of the dye, render them less able to weather bad years than those in the north of the division.

The three districts to the north of the Ganges in which indigo is most extensively cultivated are Tirhoot, Sarun, and Chumparun. The outturn from the Sarun district is estimated at 12,000 maunds on a cultivation of 135,000 beegahs. There are 55 indigo concerns in the district, of which 30 are principal concerns and 25 outworks. In Chumparun there is an equal outturn from only seven large concerns.

From the enormous district of Tirhoot the average outturn exceeds 20,000 maunds, and in the singularly successful season of last year yielded a produce of 29,481 maunds. There are 42 concerns in this district, of which 25 are principal concerns and 17 outworks.

In Behar, as in Bengal, the industry is almost entirely managed by Europeans, for the few native zemindars and bankers who have invested their money directly in the business almost all employ European managers; the one or two who do not do so only manufacturing on a very small scale. In Sarun, however, the native capitalists have lately taken to the business with unusual eagerness. Twenty-one factories with nineteen attached outworks are owned by natives in this district, and seventeen of these factories have sprung up within the last five or six years.

From the whole of the North-Western Provinces, whence the dye is exported through the Calcutta market, the outturn is estimated at about 25,000 maunds.

The cultivation of opium is a Government monopoly; no person is allowed to grow the poppy except on account of the Government. In Bengal and the North-Western Provinces it is prohibited by the Regulations; in 1860 the prohibition was extended to Assam. The cultivation is carried on with success only in the large cultivated Gangetic tract, which extends from the borders of Oudh to Agra on the west, and to the district of Bhaugulpore on the east, and to the division of Chota Nagpore on the south. The manufacture is carried on at two separate agencies,—that of Benares, of which the head station is at Ghazee-pore, and that of Behar, of which the head station is at Patna. Annual engagements are entered into by the cultivators under a system of pecuniary advances to sow a certain quantity of land with the poppy, and the whole produce in the form of opium is delivered to the Government at a fixed rate. It is a fundamental principle to leave it entirely optional with every ryot to enter into such an engagement or not. The area under cultivation in the Behar agency amounted last year to 529,482 beegahs, or about 330,925 acres; in Benares to 365,489 beegahs, or about 229,430 acres; or in both agencies together, to 560,355 acres. The extent of land under poppy cultivation in the Behar Agency was 1,34,589 beegahs in Chumparun, 111,340 beegahs in Gya, and 88,182 in Sarun. In Patna it was 39,000 beegahs, in Shahabad 36,000, in Monghyr 38,000. The opium beegah is equal to 3,025 square yards, or about five-eighths of an acre. In Bhaugulpore opium is not grown on any extensive scale, and has decreased since the time when there was a separate opium sub-district and Sub-Deputy Agent. It is now grown about Sultangunge only, and is managed and supervised by the officer stationed at Monghyr. A new sub-division has lately been established in Chota Nagpore, where the cultivation is increasing. Last year it amounted to more than 3,000 beegahs. The lands to the south of the Ganges are all irrigated, while those to the north are only irrigated to a small extent. The lands of the Benares Agency are all in the North-Western Provinces. The number of chests of opium sold last year was 42,675, the amount realized was Rs. 6,06,77,013, and the net revenue Rs. 4,25,93,759.

Silk.

The manufacture of silk is a staple industry over a considerable part of the Rajshahye and Burdwan divisions. The mulberry tree is extensively and exclusively cultivated as food for the silk worm. Almost any land which will not suit rice will suit mulberry. The manufacture is for the most part carried on by European capital, and superintended by Europeans. In the southern part of Rungpore silk culture is carried on, but the cocoons are chiefly exported to Bogra and Rajshahye. In the district of Rajshahye it is said that the average outturn of the produce of the European filatures would be about 1,920 factory maunds, which at Rs. 25 a seer will give a value of Rs. 19,20,000. The average outturn from native filatures in the same district is estimated at 3,000 maunds, valued, at the rate of Rs. 15 a seer, at Rs. 18,00,000. In Maldah the outturn is estimated at 620 maunds from European factories, of which the value may be Rs. 6,20,000, and 1,500 maunds from factories under native management, valued at Rs. 9,00,000. In Midnapore the value of the silk made in the district is valued at no less than thirty-two lakhs of rupees, and its manufacture is said to contribute, directly or indirectly, to the support of 150,000 people. There are also important silk filatures in the north-east of Beerbhoom.

The silk reeled off in the European factories is exported almost entirely to Europe. That reeled off under native management is generally bought up by native mahajuns, and is sold in Calcutta, Benares, and elsewhere.

At Coomercolly there was once a large silk factory and a brisk trade, the mulberry cultivation extending down to Jessore. On the abolition of the factory the trade fell off, but it is now said to be reviving, and there are at present two small factories in the Jessore district. There are also one or two silk filatures in Nuddea, but the produce is insignificant.

In the province of Assam also silk has been manufactured from a long period, but the export is now not very large.

The manufacture of silk is said to be in a less prosperous condition than formerly. It is stated that mulberry lands are in some places already making way for the cultivation of jute. The number of bales of Bengal silk exported during 1872 from Calcutta amounted to nearly nine thousand, which is considerably below the average of previous years.

There is annually a large export of shellac and lac-dye from

Lac.

Calcutta. There are lac factories at Elambazaar in the district of Beerbhoom, at Hazareebaugh, in Assam, at Mirzapore in the North-Western Provinces, and at Cossipore in the neighbourhood of Calcutta.

The stick lac is brought in by the natives. In this form it consists of small twigs surrounded by cylinders of translucent orange-yellow gum, in

Lac-dye.

which the insects who deposit it are imbedded. The twigs are then separated from their gummy envelopes, and the gum is scraped and rubbed by hand, till the colouring matter has been thoroughly extracted. This consists of the dead bodies of the insects buried in the gum, and gradually precipitates itself to the bottom of the water. The water is then drained off, and the sediment, after being strained, pressed, and

dried, becomes lac-dye ready for the market. The annual export of lac-dye from this Presidency is about 15,000 cwts.

The gummy exudation of the insect in the meanwhile is carefully dried in the sun and melted over a charcoal fire. It is then squeezed out either in thin sheets upon an earthen cylinder, when it becomes shellac, or in dabs upon a plantain stalk, when it is known as button-lac. This kind is considered superior; shellac fetching Rs. 58 and button-lac Rs. 68 the maund. The present market price of lac-dye is Rs. 30 a maund. The annual export of shellac from Calcutta is about 60,000 cwts.

Shellac.

Although safflower is not yet an important article of produce in Bengal generally, it is grown for local use and consumption over a great part of the country. From the Behar districts there is a slight exportation to Calcutta. The remainder of the western and the central and south-western districts produce enough for the local requirements of the population, but do not export. In the country about Dacca, however, there is a very considerable cultivation and export trade. The principal Dacca dealers report the total outturn as from 15,000 to 16,500 maunds, and that of this about 11,000 or 12,000 maunds are the produce of the Dacca district. The remainder is chiefly from Mymensingh, Tipperah, and Furreedpore. If we may take the average value of the dye at Rs. 60 per maund, the value of the exports from this division would in round numbers be from nine to ten lakhs of rupees, of which from six to seven lakhs represent the outturn in the district of Dacca itself. It is probable also that this estimate of the outturn is understated. The cultivation of safflower is said to be largely increasing. The competition, which has of late years so greatly increased in consequence of the establishment of European agents in the interior on behalf of mercantile firms in Calcutta, is annually forcing up the prices of every article of country produce. The producer gets larger profits, while the merchant or exporter gets smaller. The production of safflower is, however, not unattended with anxiety, as it has recently been reported that the supply exceeds the requirements of the English market, and that a substitute has been discovered. The annual export of safflower from Calcutta by sea is from 10 to 20,000 cwts.

Safflower.

India-rubber or caoutchouc (*ficus elastica*) is the inspissated milk or juice of various shrubs and trees only found in a country of moderate climate with a high rainfall. It is common in the forests on the foot of the hills in the Assam frontier. In the Lukhimpore, Durrung, Nowgong, and Naga Hills districts, as well as in the low valleys of the mountains immediately adjoining them, it is most abundant. It is principally manufactured in British territory, but a supply is also imported into Assam, collected by the tribes from beyond the frontier. The right to collect rubber used to be leased out by the Forest Department, but this practice has recently been much restricted in consequence of the difficulties involved in dealing with the tribes. During the hot months a tree yields little, during the cold months but little more, but during the rainy season

India-rubber.

it will furnish 50 ozs. of milk giving $15\frac{1}{2}$ ozs. of pure caoutchouc. The quantity of India-rubber exported from Calcutta in 1872-73 was 16,149 cwts., valued at Rs. 11,86,852.

Saltpetre is largely refined in the three northern districts of the Patna division, and to a less but still considerable degree in Patna and Shahabad. It is exported both by rail and river to Calcutta. Last year the quantity of saltpetre exported by river was 621,287 maunds, besides what went down by rail. Like all branches of industry in India, its manufacture is based on a system of advances. The large houses of business contract generally with middlemen, who again give advances to the village Noonyas; these, a poor and hardy race of labourers, rent a small site of saliferous earth, collect the earth into large shallow pans, puddle it, and drain off the water with the saline matter in it into earthen vessels, and then boil and strain it; this is sold to refiners, and a similar process is repeated there. It is in the refineries that the practice of educing salt from the crude saltpetre during the refining process went on, and the salt so educed did, no doubt, get into the market and helped to keep the trade alive. At present the saltpetre trade is not in a flourishing state. It received a severe blow when the duty of Rs. 2 was put on saltpetre twelve years ago, and has never quite recovered. All the Europeans in Behar who were engaged in the business have, with scarcely an exception, withdrawn from it. It is probable that the introduction of the new rules for carrying out Act XXXI of 1861, which are explained in the present year's report, accompanied as they must be by expense and vexation, will close the trade altogether. There is not much, however, to be said in favour of a trade which can only stand if supported, as the saltpetre trade no doubt has been, by the profits of smuggled salt. From the North-Western Provinces much saltpetre is sent down to Calcutta. The Custom returns show that the export of saltpetre from the port of Calcutta is about 400,000 cwts.

The cinchona cultivation in Bengal has already attained a point which promises success. The plantations were begun some ten years ago at Rungbee, near Darjeeling, in a long narrow Himalayan valley. After more or less doubt and disappointment, the plantation began to thrive in 1867-68, and there are now about 2,000 acres of Government cinchona plantations, in which the trees are from four to thirty feet high, according to their age. The varieties of cinchona which flourish best are the *C. succirubra* and *C. calisaya*, but there is yet little of the latter. There is also an experimental cultivation at Nunklow, which consists mainly of *C. officinalis*, a species which had not been found to prosper at Rungbee.

The experimental cultivation of ipecacuanha has also been attempted on some land on the lower spurs near Darjeeling, and also on the level land below. The experiment is still in its infancy, but it promises well.

The Government forests of Bengal are confined almost entirely to the Cooch Behar and Assam divisions, the Cachar district, the Chittagong Hill Tracts, and the Soonderbuns. There is, however, little

want of fire-wood in the country. The cow-dung, instead of being used for manure, is usually burnt. In Bengal the growth of jungle is very rapid. Western Bengal is supplied partly from the Soonderbuns and partly from the high lands to its west. The southern districts of Bengal draw ample supplies of cheap wood from the Soonderbuns. To the northern districts bamboos and timber are brought by river from the sub-Himalayan forests. Eastern Bengal is supplied by water from the Soonderbuns, from the frontier jungles, and from occasional private forests scattered over the country. Orissa has a good deal of forest on the hills to its north, as well as a fringe of jungle on its sea face. The open country of Chota Nagpore, Cooch Behar, and Assam, are all more or less surrounded by, and interspersed with, forest or jungle. Behar has no forests save the copse-like jungles on its southern border. Its mango groves yield a very large annual supply of timber, and it draws sál timber and bamboos from the Nepal forests on the Ghogra and Gunduk rivers. Imports of Behar fire-wood and petty timbers are very scarce and dear. The supply of large timbers for Bengal comes mainly from the sál forests of Nepaul and from the teak forests of Burmah.

Among the most important products of the Bengal forest are wild elephants, which are found and caught

Elephants.

in the jungles of Assam, of Chota Nagpore, of the Orissa tributary estates, of the Bhutan Doonars, of the sub-Himalayan valleys, and of the Chittagong hills. Wild elephants, according to the ancient practice of all Indian provinces, belong to the paramount power, and no one can hunt or kill them without license from Government officers. For many years past Government kheddahs (or elephant-catching establishments) have worked, sometimes on the south-western frontier of Bengal, now in Chittagong, and sometimes in Assam, and have caught large numbers of elephants for the Commissariat Department. Meanwhile all the elephant grounds have been more or less worked by native elephant-hunters, who catch elephants for the local markets after the native fashion. In the eastern districts every landholder of consideration has one or more elephants; many zemindars have five, ten, or even more elephants each. It costs comparatively little to keep an elephant in the districts where rice is cheap and bamboos are plentiful. With the recent rapid rise in landed incomes, the demand for elephants has increased largely, and their price is more than double what it was twelve years ago, and a well grown elephant of medium size is now worth from Rs. 1,200 to 2,000. We have at present no exact statistics of the number of elephants caught yearly all over Bengal, but we know that the Commissariat Department sometimes catches more than 50 in a year; 115 were caught last year in the Lukhimpore district alone. The Rajah of Shushong sometimes catches 30 or 40 a year in the forests below the Garo Hills; the Julpigoree zemindar used to catch 20 or 25 a year. A good many must be caught in the other districts of Assam, some few in the Chittagong division, and on the south-western frontier by the Maharajah of Oodeypore. Altogether the yield of the Bengal forests cannot fall short of 250 elephants a year. The best elephant grounds are the Lukhimpore forests, stretching over some 8,000 or 9,000 square miles. The interior of the recently annexed Garo country is said to be an excellent elephant ground, but

neither European nor native elephant-hunters have ever yet penetrated into it. In another part of this report will be found an account of the steps which have been taken to protect the State rights in wild elephants, to prevent hunters from catching elephants on wasteful systems, and to reserve to the Military Department of the State the right to buy in at reasonable prices as many newly-caught elephants as the public service may require.

The buffaloes of Assam are the best in these provinces, a result which is attributable to the intermixture of the Bengal breed with the wild buffalo.

In Bengal the supply is scant; it is very poor in the central districts, which are supplied for the most part from Beerbhoom, the north of Midnapore, Bancoorah, Purneah, and the Western frontier. The Purneah breed of buffaloes is superior. In Eastern Bengal, especially in the Dacca and Sylhet districts, the buffaloes are a very fine breed. Buffaloes are used for agriculture, but principally for draught and burden.

Their milk, which is richer than that of the common cow, is used for making curds and ghee. The well-known Dacca cheese, which when really good is thought by some to equal European cream cheese,

is made from buffaloes' milk. The metna, the methen or metna is a peculiar breed

found in Cachar and the Eastern Hills, in colour resembling a buffalo, humped, with short black horns, and a light mane. The metna is a species of bison, and a magnificent animal. It is not used as a beast of burden, and is only prized for its flesh and for ceremonial sacrifice by the Kookies.

The cattle in Bengal are all of the humped or zebu kind. As the Assam buffaloes are the finest, so the Assam cattle are the worst, being over-

bred. The milch kine of Dacca are reckoned the best in Bengal, and chiefly belong to the *deswali* (up-country) breed, which is employed for working oil and sugar mills, draught, and other heavy work. The gowalas, or cow-keeping caste, keep herds of cows for their milk. Milk is churned into butter and afterwards burned down into ghee, and in this condition is enormously consumed in every part of Bengal. Milk is the favorite drink of the upper classes, and is sold most cheaply,—from ten to thirty seers for a rupee.

Even in the most populous districts of Bengal it cannot be said that local breeding is ordinarily insufficient to supply the local demand; but in other places, such as Chota Nagpore, the Terai, and Orissa, where pasture land is comparatively abundant, the breeding is excessive, and a constant export flows into the central districts, which annually supplies the myriads that are carried away by disease and murrain. In all parts of Bengal the condition of the cattle is wretched; they are half starved, and, as might be expected in a wholly agricultural country, exist in profusion. The first feature about cattle which strikes an Englishman on arrival in India is their enormous number and their poor condition. Miserable as they are, they are seen everywhere in herds. A census of horned stock in Bengal has not yet been attempted or taken, but we know that the export of cow-hides from Calcutta exceeds five millions yearly, and it is not to be assumed that this total

represents more than half the number of cattle that die every year. The general rate of mortality among cattle is also unknown, but it has been ascertained, and may be mentioned in this place, that during a period of ten years, from 1860 to 1869, inclusive, the average mortality of stock at the Hissar stud farm was 1,435 a year, or a little over 14 per cent. per annum. Over a small area in Lower Bengal the mortality, after the inundation of 1871, amounted to about 100,000, or ten times the mortality of ordinary years, as evinced by the statistics of hide export; but a supply of cattle was nevertheless obtainable for the next season's sowings, and the stock has since for the most part been replenished. In Assam, where cattle are as exceptionally numerous as they are puny and worthless, it has been estimated that there are fifteen head of cattle for every adult inhabitant. There are Goala families in Bengal, with no cultivation or land for pasturage, in possession of 1,000 or 1,500 head of cattle. More land is, however, annually brought under the plough, and as pasturage becomes scarce the cattle deteriorate in condition. The people are too poor, and cattle are too numerous and valueless, to justify a general resort to stall-feeding. In exceptional cases it is practised, but as a rule cows and bullocks feed and graze together wherever they can find a fallow, or are allowed to trespass upon a cultivated, piece of land. The grass that grows over the roads often affords in point of fact the most desirable pasturage in the neighbourhood. At the same time the indiscriminate way in which the finest bulls are carried off to Calcutta and elsewhere to work for the municipalities tends further to impair the stock. Brahmini bulls are the only bulls kept for breeding purposes, and near the Presidency at all events their supply is now unequal to the demand. The myriads of cattle in Bengal get annually less and less to eat, and are worse fed; their uses are limited to agricultural, draught, and dairy purposes: the proportion slaughtered for food is infinitesimal. On the other hand, the natural increase of stock was estimated before the Cattle Plague Commission of 1870 at not less than eighteen or twenty per cent. Individual cultivators may complain of having fewer bullocks now than formerly, but it is doubtful whether upon the whole there has been any considerable diminution of stock. The most competent observers are of opinion that the comparative cheapness of money is a sufficient explanation of the increase in their price. The severest losses and most appalling mortality never seem to affect the area of cultivation. Thousands of cattle are born every year for which there can be no practical use; there is nothing to feed them with, and they perish in swarms by disease and exhaustion induced by hunger. It is a cruel misfortune, and a want of economy in these provinces, that the old Indian rule of setting apart a common grazing ground has been forgotten. The subject of food for cattle, and through cattle the importance of making manure for land, are the most vital agricultural questions of the day in India.

The return of cases which have actually occurred in the criminal

Cattle-poisoning.

courts of Bengal does not support the theory of the frequency of cattle-poisoning; on the other hand, there are occasions and localities where the crime has undeniably been found to have assumed a serious magnitude,

and to have become a system of organization. It was so in Mymensingh in 1868, in Jessore in 1869. Raids of gangs with poisoning intent are said to have taken place in the Terai on the Nepaul frontier. The occurrence of similar raids has been reported from Hazareebaugh and Noakhally. At the same time the crime is so rare as to be virtually unknown in Balasore, Pooree, Dacca, Backergunge, Furreedpore, Chittagong, Burdwan, Bancoorah, Hooghly, Howrah, Gya, Cooch Behar, and Assam. It seems that the offence is not a common one or increasing within these provinces.

The motive for the crime, when it is committed, is the hide of the animal. The criminals are always members of the Chamar or Mochhee caste, of which at least one family is attached to every village. These people are hereditary skinners and leather-dealers, and under any circumstances would remove the skin of the dead cattle. Their occupation has, however, been stimulated of late years into abnormal activity by the extension of the hide trade from Calcutta. This trade has more than doubled during the last three or four years. The smallest scrap of East Indian leather is not without its value in the Indian market, and slaughtered and dead hides and rejections are sought for with eagerness. The demand at the export towns represented by men and firms with large dealings has spread through a chain of native agency to the village Chamar. The local agents bind down the Chamars by money advances and legal instruments. The effect of this system is obvious, and it may confidently be asserted that three-fourths of the cattle poisoning which does take place is the result of these advances. The hide trade has hitherto been unknown in Assam and the Soonderbuns. The trade in slaughtered hides is conducted by Mahomedans, and is above suspicion. It is a matter of keen business. Dacca, Cuttack, Midnapore, Burdwan, Purneah, Patna, Durbhungah, are the principal centres of the trade in the interior of these provinces. The total number of hides of all sorts exported from Calcutta in 1871-72 was 7,571,120, of skins 3,118,484; in 1872-73 of hides 7,003,395, of skins 2,785,109.

With the exception of the western districts, there is no horse breeding in these provinces; and in Eastern Bengal generally during the rains, and in Tipperah and Mymensingh, the climate seems to be quite fatal to horses. The breed of horses is supplied to the Military Department and to Europeans from Australia, Arabia, and the North-West Frontier, and from the up-country Government studs. The Bengalee *tattoo* is indigenous in almost all districts, but is a very poor specimen of the equine race. The Burmah and Munipooree ponies are of better breed. The Bhoota ponies have also long been famed, and are held in much esteem along the frontier.

The breed of goats is abundant in these provinces. Every villager, if he can, keeps goats, which are looked after and cherished by his wife and children—the she-goats for their milk, while the male kids are for the most part killed and eaten as kid mutton by the Mahomedan population. The milk is nutritious, but goat's mutton, though relished by those who eat it, is most insipid and unpalatable to a European. The Bengal

breed of goats is very poor and indifferent; the *Jamuna paharee* goats, which are found in all the western districts, are much larger and finer animals, if not less ungainly, and are a superior stock. Drovers of them come down from Behar every cold weather into Bengal for sale.

In the eastern and deltaic districts of Bengal, in parts of the Rajshahye division, in the Cooch Behar and Assam divisions, there is, on the other hand, little or no habit of sheep breeding. Such sheep as are consumed are imported into these districts from Behar; imported sheep do not thrive in them, but deteriorate greatly in a very few generations. In the Burdwan division there are a large number of hardy sheep of the small, Bengal breed; a few such sheep are to be found in almost every village. In Orissa the same small and hardy breed of sheep prevails; but the demand for mutton is much smaller, and the flocks of sheep are much fewer. The quality of all these sheep is wretched in the extreme. In parts of the Bhaugulpore division, notably in the Sonthal Pergunnahs, sheep are largely bred. But the districts of the Patna division, especially Gya and Shahabad, are the principal homes of sheep breeding. From these districts very large numbers of sheep are driven southwards and eastwards annually to supply the requirements of Calcutta, Bengal, Cooch Behar, and Assam. The number of sheep killed daily in Calcutta and the suburbs is reported to be about 145 head. Probably the annual requirements of Calcutta and the suburbs do not fall short of 50,000 head of sheep during the year. As most of this supply comes from Behar and the western districts, the drain on the sheep resources of those provinces must be very large. Still the stock seems to have borne the drain for many years, and the sheep of Behar continue not only to feed Bengal, but to furnish material for the Patna and Behar blankets, which are so largely exported to the Calcutta and Bengal markets. It is probable that the supply of sheep is on the whole somewhat smaller than it used to be, and the price is certainly higher. The supply of sheep will most likely never be considerable in the warm, damp climate of eastern Bengal and Assam; but there seems no reason why sheep should not thrive well on the Chota Nagpore uplands: while on the hills about Gya, and in Shahabad above the Sonthal Pergunnahs, the supply of sheep will probably increase as the demand for and price of mutton rise.

Poultry are reared to meet the demands of the European market.

Poultry.

They are not much eaten by the natives themselves. The best poultry in Bengal are reared at Chittagong and by the Mugh community in the district of Backergunge.

All over Bengal there are the usual local handicrafts, the productions of which are purely to supply local demand. Weaving and the manu-

MANUFACTURES.

facture of cotton thread are the occupation of a large number of inhabitants of every district, and although the extensive imports of cloth and piece-goods from England are driving the finer native fabrics out of the market, the decline has been more than compensated by the vast increase of trade and the greater facilities of communications to other trades and industries which, if less artistic, are quite as remunerative

and more useful and beneficial. If the demand for the exquisite muslins of Dacca has been affected, native industry is still able to find profitable employment in weaving cloth of a less delicate texture from English spun and imported yarns. The growth of the jute trade has given an impetus to the manufacture of gunny bags over all the eastern and central districts. The spinning and weaving of the fibre into cotton bales and grain and sugar bags, and its preparation in the raw state for exportation, afford occupation to thousands; and in Calcutta and its neighbourhood many mills are established, in working which the natives have displayed great aptitude. Carpenters, blacksmiths, goldsmiths, potters, and oilmen, are settled in almost every village. The manufacture of beads of sorts, which are so universally worn as necklaces by the lower orders of Hindoos, is a very generally spread occupation. In this the women take a large part. The weaving of wicker and basket work is the special occupation of the Chamar or Moochee caste, and for these articles there is great demand in a community so given to agriculture. The native shoes are also always made by Moochees. The *sola* weed grows with the *aoos* and *amun* rice, and is manufactured into the *sola* hats or *topees* worn by Europeans, and into artificial flowers and ornaments for the native ceremonies. The different manufactures which are specially carried on in Bengal, and for which each part is most celebrated, are as follows :—

The manufactures of the Burdwan division are principally silk and indigo. Midnapore has also a specialit  in small mats, which are much used for sleeping on. Several places in the division are famous for their weaving and the manufacture of metal pots and pans. There is a lac manufactory at Elambazar in Beerbhoom. There are several rope manufactories at Howrah, as well as a large number of screw presses for cotton, jute, and fibres; also flour mills and iron foundries. In the town of Hooghly there are three native steam mills for pounding bricks into soorkee. There is a jute mill at Serampore, and a yarn manufactory at Rishra. There is a large factory at Fort Gloucester, fifteen miles down the Hooghly. Another jute mill is being built at Pulta Gh t. There is a brisk manufacture of paper for native use carried on at the Bally Paper Mills in the Hooghly district.

Indigo and date sugar are the staple manufactures of the Presidency division. Among other manufactures the fine cloths prepared by the weavers of Santipore in the Nuddea district deserve notice. A superior description of cotton cloth is also manufactured in the Satkeerah sub-division of the 24-Pergunnahs. In the Jessore and the 24-Pergunnahs there is a manufacture of shell-lime collected on the banks of the rivers and khals in the Soonderbuns. Nuddea is famous for its brass utensils, which are exported to various parts of Bengal. There are large jute mills and factories at Baranagore, and at Gowripore in the 24-Pergunnahs, as well as lesser factories.

Silk and indigo are the principal manufactures of Rajshahye. Moorshedabad specially produces silk cloth, articles of ivory, gold and silver filagree work, brass utensils and gunny bags; Dinagapore, coarse cloth

and gunny bags; Pubna, gunny bags; Rajshahye and Bograh, silk cloth; and Maldah, silk cloth and brass utensils.

There is no manufacture on a wholesale scale in the Dacca division except tea and indigo. There is a considerable quantity of coarse cloth for use by the lower orders made in all the districts; it is considered more durable than Manchester cloths. Date sugar is made in Furreedpore in sufficient quantities to be exported from the district. In the island of Dukinshabazpore and the south of Backergunge cocoanut-oil is made and exported to Chittagong and Calcutta. There is also a considerable trade in iron and brass implements and vessels of local manufacture. There is also some lac-dye manufactured here, and soap, known in the market as Dacca soap. The manufacture of finer cloths and muslin and kasheeda (cotton cloth embroidered) of the most delicate workmanship have made the city of Dacca celebrated in the past. The cheese known as Dacca cheese is the production of a village in the Kishoregunge sub-division of Mymensingh. A considerable quantity of gold and silver ornaments is exported to Calcutta. Country paper is manufactured at Atteah in Mymensingh.

In the town of Chittagong and its environs the principal industries are carpentry, ship and boat-building, blacksmith's, brazier's, and gold and silversmith's work. Sea-going vessels of two, and even three, masts are built and launched here for the coasting trade and for voyages to Ceylon, the Laccadives, Cochin, and other Indian ports. The shipwrights are nearly all Mahomedans. The braziers make the usual domestic utensils of brass and copper, and the gold and silversmiths can execute plain or ornamental work to pattern, but do not seem to have any original designs like the Cuttack or Dacca men.

In Cox's Bazaar the Mughls make both silk and cotton cloth. The *daos* manufactured by the Mughls have a long blade fitted straight into the handle and widening towards the end, which is square; they are much heavier and more powerful instruments than the ordinary Bengali *dao*. Japanned boxes and other Burmese work are also to be had at Cox's bazaar. In carpentry and joiners' work, especially as applied to house-building, the Mughls are much more expert than their Bengali neighbours. Their wooden *khangs*, or rest-houses, are well and solidly built, and some of the houses of well-to-do residents at Cox's Bazaar are not only substantial, but very picturesque and neatly ornamented. They are built entirely of timber raised on piles after the Burmese fashion. The roof is shingled, and with its surrounding verandahs and decorated gable-ends the whole presents an appearance not unlike that of a Swiss cottage.

In the district of Noakhally country cloth is manufactured on a very small scale. Something is done in the manufacture of molasses from date-juice. Coarse cloth is the only article produced in Tipperah, and that in no large quantity.

In the Patna division the manufacture of indigo and opium are of paramount importance, and have already been alluded to. An account of the saltpetre manufacture has also been given above. Sugar is made

Patna.

into molasses and sugar-candy in enormous quantities. Of minor manufactures, an inferior tusser silk is produced in Patna. Towels and bath linen are a famous product of the Barh sub-division, and skull caps of Behar. Tobacco manufactured, prepared for the hookah with spices, is a specialité of Patna. In Gya there is a small manufacture of tusser silk and carpets, and a specialité of ornamented carving in black stones. Paper, blankets, and brass utensils, are manufactured in Shahabad. The local paper manufactory is in the sub-division of Sasseram on the banks of the Soane. In Sarun there is a local manufacture of coarse cloth, and the outturn of the ornamental brass work and pottery of the Sewan sub-division has acquired some celebrity.

The principal manufacture of Bhaugulpore is indigo. Firearms and hardware of inferior quality are manufactured at Monghyr.

The cabinet-makers of Monghyr are worth mentioning; considerable amount of skill is evinced by them in making inlaid writing desks and other fancy cabinet-wares, rosaries, necklaces, and bracelets. Monghyr is also famous for its baskets and other things made of bamboo. Tusser silk is a special manufacture of the district of Bhaugulpore.

In Orissa there is little to notice; brass vessels and brass ornaments and coarse cloth are the chief articles made. Cuttack is celebrated for its silver ornaments. Salt manufacture has kept increasing in Balasore and Pooree, but has declined in Cuttack. There are difficulties also of transport from the Cuttack coast, which add to the charges and decrease the profits of Cuttack-made salt.

Salt manufacture is the staple of Orissa, and is susceptible of unlimited development.

There are two lac factories at Jhalda in Chota Nagpore, and one large concern at Ranehee. Tusser silk is woven, and there are an immense number of weavers in this division. The bulk of the people are still content with country cloths, but among the upper classes the taste for English-made goods has spread as it has elsewhere. In parts of Singbhoom and Manbhoom there are masses of soap-stone, which the people in the vicinity have for ages worked into vessels of different kinds.

In Assam there is not much in the way of manufactures. There are the usual potters in each district, but this work is of a poor description. There are also a few workers in brass and iron, but the articles manufactured are merely for local use. The manufacture of silk still continues, but it is not in a flourishing state. In the Khasi Hills there is a good deal of iron work, but less, it is said, than formerly.

Of the mineral resources of Bengal, coal only has been largely developed. Iron, however, is at least as abundant as coal in many places, and in these days of dear iron the fact is of no slight importance that unlimited quantities of the richest ironstone are found in the closest conjunction with coal in large tracts where

MINES AND QUARRIES: MINERALS.

Coal and iron.

lime is also plentiful; and it may be said that if anywhere in India iron can be manufactured on a large scale in the European method, it must be in these provinces.

The largest and best coal mines of Bengal are in the Raneegunge sub-division of the Burdwan district, and in the division of Chota Nagpore.

There are now altogether 44 coal mines at work, of which 19 mines turn out more than 10,000 tons of coal a-piece per annum. In the larger and better mines coal is raised by steam from pits and galleries. In the smaller mines or workings coal is raised by hand-labour from open quarries. In the Raneegunge coal-field alone 61 steam engines, with an aggregate of 867 horse-power, are at work. Only one seam (or set of seams) of a less thickness than $8\frac{1}{2}$ feet is worked, and the average thickness of the seams at the Raneegunge mines is about 15 or 16 feet. The pits are mostly shallow; very few are more than 150 feet deep. The Bengal Coal Company, with its mines at Raneegunge and westwards, is able to raise more than six millions maunds of coal annually. The gross valuation of coal mines in the Burdwan district has been registered under the Road Cess Act at Rs. 2,88,361. The

Chota Nagpore.

coal-fields of the lower Damoodah and Burrakur are occupied for the most part by private companies; the coal-fields in Palamow belong to Government. The Rajhara coal mine in Palamow supplies coal for the Dehri irrigation works, and to some extent for the East Indian Railway Company. These mines comprise an area of twenty-five to thirty square miles, the seams being of an average thickness of from eight to ten feet, and the coal is said to be of fair quality. The East Indian Railway Company now generally burn in their engines coal from their own mines at Kurhurbari, which produce a coal of first-rate quality. There are great stores of coal for future ages in the Chota Nagpore division. The Eastern Bengal Railway and the River Steam Companies are at present the chief customers of the coal owners.

The use of coal in the Public Works Department of Government has much increased of late years. On the Soane Canal works, and at all public works near the great rivers, bricks and lime are now generally burnt with coal instead of wood or farm refuse. Coal has, however, not yet become the domestic fuel of the countrymen in the coal districts. In Raneegunge alone it is said that the people are taking to coal for cooking purposes. In the Hazareebaugh and Palamow districts, where coal can be delivered at Rs. 2-8 or Rs. 3 per ton, iron-smelters and village blacksmiths still use charcoal for their furnaces, and the ordinary country people use wood for all domestic purposes.

Arrangements have been under consideration for smelting iron in coal furnaces after the English method at Hazareebaugh and elsewhere. At present iron is smelted from ores of different kinds after the rude native methods in many parts of the coal districts, but there are no manufactories on the European method, and it is very desirable, in the face of the great rise in the price of British iron, and the large and increasing demand for Railway iron of all kinds, to develop the production of the Indian iron works.

The districts of Assam are amply endowed with mineral resources.

Assam.

The Khasi and Jynteah Hills especially excel perhaps any part of India in respect of minerals. If there were only some addition to the population so enterprising and energetic, we might expect to have not only cattle and cinchona, cotton and fruit trees, but it is probable that the combination of the best coal, iron, and lime in one place, together with an iron-working population, might make these hills the best manufacturing district in India. The newly annexed tract of the Garo Hills may possibly much extend the field for such industries. The chief mineral products of the hills are iron, lime-stone, and coal. The iron ore excavated in 1872-73 is estimated at 5,000 maunds, the limestone quarried to be 1,550,000 maunds, the coal quarried to be 1,000 maunds. Smelted iron used formerly to be prepared for export more largely than at present. Of the sixteen known out-crops in the hills, Lakadong is the only field where coal is at present both plentiful and accessible. In the Lukhimpore district there are coal mines in the neighbourhood of Jeypore, and at the foot and along the slopes of the lower Naga Hills. They are really quarries, not mines; the coal lying in seams near the surface, and requiring no mining operations. In Sebsaugor there is a coal mine worked by the Assam Tea Company in the Naga Hills, for the privileges of working which an annual present is made to the Nagas. There is also coal of good quality in the Golaghaut sub-division. Surface lime was discovered at the foot of the Bhootan hills some two years ago. It is of a superior description, and it is believed that the quarry, though it does not extend over a wide area, might be profitably worked on a small scale.

Mines scarcely exist in the Patna division. There is a talc mine near Rujowlie in the Gya district,

Patna.

which is seldom worked now, though there seems to have been a certain amount of enterprise expended on these talc mines many years ago. Of other minerals there are stone quarries at Burakur on the Gya hills, at Behar, and near Sasseram at Dhodund, and elsewhere on the Rhotas range; and there is a most valuable supply of limestone to be had, as soon as ever water-carriage is available, from quarries near Rhotas.

Except in the Sonthal Pergunnahs, there are no mines in the Bhaugulpore division, but various minerals are found in small quantities

Bhaugulpore.

on the hills in the south of Monghyr and Bhaugulpore. In Bhaugulpore lead, silver, and copper, exist, and the lead has been pronounced a valuable mineral with a large portion of silver in it. There are several coal mines in the Damin in the Sonthal Pergunnahs, but only one is now worked. A few thousand maunds of coal are transported now and then to the district of Bhaugulpore for purposes of burning bricks, &c. The coal is of a poor description. When the East Indian Railway loop line was under construction, several lakhs of maunds of coal used to be taken for burning timber and lime, but there is little or no demand for it now. There are stone quarries in the district of Monghyr.

Little is known of the mineral resources of Darjeeling. Petroleum and coal are spoken of as existing; Darjeeling. copper and limestone are known to exist. In the Western Dooars anthracite is known, and coal is believed to exist. We shall learn more of the mineral resources of this division now that a geological survey of the Sub-Himalayan country has been sanctioned.

In the Chittagong division traces of coal have been discovered in the Cox's Bazaar sub-division and in Chittagong. the Chittagong Hill Tracts. Iron ore has been discovered in the Lalmye Hills in Tipperah.

Throughout the delta and alluvial country of Orissa there are neither mines nor minerals. Inland, Orissa. and in the hill tracts, the prospects are more promising. Coal resources are believed to exist in the vicinity of Naraje near Cuttack, and the sandstone formations in the Khoordah sub-division of Pooree indicate the probability of coal being discoverable there. The Taljharee coal-fields in the Tributary Mehals are favorably situated within a few miles of the Brahminee River, where water carriage is available during the rains, and experiments are now being effected there by Government. There are valuable beds of iron ore in many parts of the tributary states, and particularly in Taljharee, where iron and coal are found side by side, and in Dhenkanal and Keonjhur, where rich iron ore is found and worked pretty extensively by the native methods. The hill streams of Dhenkanal and Keonjhur yield gold dust in small quantities in the river sand, but the produce has not been so far remunerative.

There are no mineral resources whatever in the low-lying alluvial tract comprising the Rajshahye, Presidency, and Dacca divisions.

HISTORICAL SUMMARY OF THE CIVIL ADMINISTRATION OF BENGAL.

It was in the year 1640 that two ships from England to Bengal first opened the trade of the East India Company to this part of India under a patent for exemption from customs obtained from the Emperor Shah Jehan through the good service of a Surgeon named Broughton, sent to attend the Emperor's daughter from Surat.

Early possessions of the British in Bengal.

In 1698 the Prince Azeem-u-Shah, grandson of Aurungzebe and Soubahdar of Bengal, Behar, and Orissa, allowed the Company's Agents to purchase the talookdar's right to the three villages of Calcutta, Soota-nutty, and Govindpore, subject to an annual revenue of Rs. 495. The

Calcutta and adjacent villages—1698.

transactions of the Company during this period were entirely commercial, and up to 1707, when Calcutta was declared a Presidency, it was dependent upon Madras, where there was a fort and garrison which the Company had not been allowed to maintain in Bengal. Moreover, although in 1717 the United Company obtained a royal grant from the Emperor Ferokhseer granting them, besides privileges of trade, permission to purchase the talookdaree of 38 additional villages adjacent, subject to an annual revenue of Rs. 8,121, no independent authority was conveyed to the Company, nor does any appear to have been claimed.

The treaty with Seraj-ud-Dowlah in February 1757, after the recapture of Calcutta, by the fourth article of which the Company were "allowed to fortify Calcutta in such manner as they might esteem proper," and by the fifth of which it is stipulated "that siccas be coined at Alinagur (Calcutta) in the same manner as at Moorsshedabad," with a general promise of amity, may be considered to have first established the Company's territorial character in Bengal. On the 4th June 1757, moreover, by a treaty entered into with Jaffer Ally Khan this agreement was confirmed, and the Company's zemindary extended six hundred yards without the ditch of Calcutta, and over the 24-Pergunnahs south of Calcutta as far as Calpee.

24-Pergunnahs—1757.

In the treaty concluded with the Nawab Meer Mahomed Cossim Ally Khan on the 27th November 1760, it was agreed that Cossim should

succeed as Nawab of the Soubahdary of Bengal, Behar, and Orissa ; that the English army should be ready to assist him in the management of affairs, and that the lands of the chaklas (districts) of Burdwan, Midnapore, and Chittagong, should be assigned for all the Company's charges. A complete and full cession of these three districts was then effected and confirmed again by Jaffer Ally Khan in the treaty for his reinstatement dated 10th July 1763.

After the expulsion of Cossim Ally Khan and the decisive battle of Buxar, the civil authority over Bengal, Behar, and Orissa,* was conferred in perpetuity on the East India Company by the Emperor Shah Alum, under a royal grant in August 1765. The Nawab of Bengal recognized this grant under an agreement dated 30th September in the same year, and consented to accept a fixed stipend for the maintenance of himself and his household.

GRANT OF DEWANNY.

August 12th, 1765. Administration, however, carried on by native agency until the Company stood forth as Dewan in 1772.

In 1766 Lord Clive, then President of the Council of Fort William, took his place as Dewan, and in concert with the Nawab, who sat as Nazim, opened the *pooneah*, or ceremonial of commencing the annual collections in durbar, held at Motijel, near Moorshedabad.

But though the civil and military power of the country and the resources for maintaining it were assumed on the part of the East India Company, it was not thought prudent to vest the immediate management of the revenue, or the administration of justice, in the European servants. There was a resident at this time at the Nawab's Court who inspected the management of the Naib Dewan, and a chief who superintended the collections of the province of Behar under the immediate management of a distinguished native, Schitab Roy ; but with these exceptions there were no other Covenanted servants of the Company in the interior except those who were administering the zemindary lands of Calcutta and the 24-Pergunnahs, and the ceded districts of Burdwan, Midnapore, and Chittagong, which had again been confirmed to this Company in perpetuity by a royal grant.

In 1769 Supervisors were appointed by Mr. Hastings, with powers of superintending the native officers employed in collecting the revenue or administering justice in different parts of the country ; and councils with superior authority were in 1770 established at Moorshedabad and Patna. The Supervisors

Supervisors—1769.

were furnished with detailed instructions for obtaining an account of the provinces ; the state, produce, and capacity of the lands ; the amount of the revenues, the cesses or arbitrary taxes, and of all demands whatsoever which are made on the cultivators ; the manner of collecting them, and the gradual rise of every new impost ; the regulation of commerce, and the administration of justice. The information elicited by these

* The Orissa of the last century included only the district of Midnapore and a part of Hooghly, or more accurately the tract of country lying between the rivers Suburnorekha and Roopnarain, Orissa Proper was conquered and annexed from the Mahrattas by Lord Wellesley in 1803.

inquiries showed the internal government to be in a state of profound disorder, and the people to be suffering great oppression. Nevertheless seven years elapsed from the acquisition of the Dewanny before the Government deemed itself competent to remedy these defects. It was not till 1772 that the Court of Directors resolved to "stand forth" as Dewan, and by the agency of the Company's servants to take upon "themselves the entire care and management of the revenues."

By the adoption of a plan then proposed by Mr. Hastings and four members of his council, the institution of the internal government were established as follows :—

Mr. Hastings' Regulations—1772.

In the Revenue Department at the Presidency a Board of Revenue was appointed, consisting of the President and Members of Council, with an Accountant-General and assistants. The exchequer and treasury were removed from Moorshedabad to Calcutta. In respect to the provinces it was resolved that the Supervisors should now be designated Collectors, with each of whom a native officer, chosen by the Board and styled Dewan, was joined in the superintendence of the revenues.

REVENUE.

Supervisors designated Collectors.

Under the regulations framed for the Judicial Department, two courts were instituted for each provincial division or collectorship,

JUDICIAL.

Collectors preside over Civil and Revenue Courts.

"one by the name of Dewanny or " Civil Court, for the cognizance of civil " causes ; the other named Fouzdary or Criminal Court, for the trial of crimes and misdemeanours." The Collector presided over the Civil Court attended by the provincial native Dewan and other officers. In the Criminal Court the kazees

Native Criminal Courts.

and mooftee of the district, and two moulvees, sat to expound the Mahomedan law, and to determine how far delinquents were guilty of its violation ; but it was the Collector's duty to attend to the proceedings of this court so far as to see that all necessary witnesses were summoned and examined, and that the decision passed was fair and impartial. The Collector had no further concern in the criminal administration. Appeals from these courts were allowed to two superior courts established at the chief seat of government,—one under the denomination of Dewanny Sudder Adawlut, or Chief Court of Civil Judicature ; the other, the Nizamut Sudder Adawlut, or Chief Court of Criminal Justice.

Sudder Court.

The chief Civil Court consisted of the President and Members of Council, assisted by native officers. In the Chief Criminal Court a Chief Officer of justice presided, appointed by the Nazim, and assisted by the head kazees and mooftees and three eminent moulvees. Over this latter Court, however, a control was vested in the President and Council, similar to what was exercised by the Collectors in the provinces.

A short experience, however, showed that the superintendence over criminal justice, when exercised by the President, involved too heavy

duties, and in October 1775 the Court of Nizamut Adawlut was moved back to Moorshedabad and placed under the control of the well known Mahomed Reza Khan, who was appointed Naib Nazim.

In the meantime (1774) the European Collectors were also recalled

Collectors withdrawn.

from the provinces and native aumils were appointed in their stead. A new plan of police was introduced. Native officers styled fouzders were appointed to the fourteen districts or local jurisdictions into which Bengal was divided. The superintendence of the collection of the revenue, removed from the Collectors, was vested in six Provincial

Provincial Revenue Councils established—1774.

Councils, which were established at Calcutta, Burdwan, Dacca, Moorshedabad, Dinagepore, and Patna. The administration of civil justice was on the same principle transferred to the aumils.

Vital changes were, however, speedily effected in these arrangements. The constitution of the Dewanny Adawlut was transformed by the establishment in 1780 in each of the six great provincial divisions of a court of justice distinct from, and independent of, the Revenue Council.

Provincial Civil Judges established independent of Revenue Courts—1780.

Over this court a Covenanted servant presided, whose jurisdiction extended over all civil and rent cases. These six divisions were in their civil aspect augmented shortly to eighteen, in consequence of the inconvenience experienced from the too extensive jurisdiction of the six before instituted. The Judges of these courts were wholly unconnected with the Revenue Department except in the four frontier districts of Chittra (or Hazareebaugh), Bhau-gulpore, Islamabad (or Chittagong), and Rungpore, where for local reasons the offices of Judge, Magistrate, and Collector, were vested in the same person, but with a provision that the judicial authority should be considered distinct from, and independent of, revenue functions.

Simultaneously with the extension of the civil courts, the Provincial Councils were abolished, and all

Provincial Revenue Councils abolished; Collectorships reconstituted—1781.

the revenue affairs of the provinces brought down gradually to the Presidency, there to be administered by five of the most able and experienced of the civil servants, under the designation of a "Committee of Revenue." One President of each Provincial Council was, however, to remain officiating as Collector under the Committee of Revenue until further orders, as likewise were the four Judge-Magistrate-Collectors, who had been separately stationed in the frontier and least civilized districts.

The establishment of fouzders and tannahdars, introduced in 1774, was also abolished in 1781, and

Civil Judges vested with executive magisterial powers—1781.

the eighteen civil Judges "were invested with the power, as Magistrates, of apprehending dacoits and persons charged with the commission of any crime or acts of violence within their respective jurisdictions." They were not, however, to try or punish such persons, but "were to send them immediately to the daroga of the nearest Fouzdary Court, with a charge in writing setting forth the grounds on which they had been

apprehended." They had merely powers to act as an executive police, leaving the trial and the infliction of punishment to the native Mahomedan officials. Provision was at the same time made for cases where, by especial permission of the Governor-General and Council, "certain zemindars might be invested with such part of the police jurisdiction as they formerly exercised under the ancient Mogul Government." In such cases the European Judge in his capacity of Magistrate, the daroga of the Criminal Court, and the zemindar, were to exercise a concurrent authority for the prevention of crimes.

Under instructions which Lord Cornwallis brought with him from

LORD CORNWALLIS.

Union of the offices of Collector, Civil Judge, and Magistrate—1786.

England in 1786, the revenue and judicial institutions of the country were again modified. The Committee of Revenue changed its designation to that of Board of Revenue. Its authority and functions were continued. The European Civil servants superintending the several districts into which the country was divided were each of them vested with the united powers of Collector, Civil Judge, and Magistrate. In proposing this union of different authorities in the same person, the Court of Directors were influenced by the consideration of its having "a tendency to simplicity, energy, justice, and economy:" they placed on record that they were actuated by the necessity of accommodating "their views and interests to the subsisting manners and usages of the people, rather than by any abstract theories drawn from other countries, or applicable to a different state of things."

It was only in the administration of justice in the *cities* of Moorsheadabad, Dacca, and Patna, that district courts were established, superintended by a Judge and Magistrate.

The administration of criminal justice remained, however,

Functions of a Criminal Sessions Court still discharged by Native officers.

vested in the Naib Nazim, or Deputy of the Nawab, to whose courts, which were superintended by the Mahomedan law officers, almost all criminals apprehended by the Magistrate were referred for trial. The Collector, in his capacity of Magistrate, could only decide upon the most petty charges. But towards the end of 1790 a very important change took place in this arrangement. It was declared that, with a view "to ensure a prompt and impartial administration of the criminal law, and in order that

Criminal administration assumed by the British.

all ranks of people might enjoy security of person and property, the Governor-General in Council had resolved to accept the superintendence of the administration of criminal justice throughout the provinces." In conformity with this resolution the Nizamut Adawlut, or Chief Criminal Court of justice, was again removed from Moorsheadabad to Calcutta, to consist of the Governor-General and members of the Supreme Council, assisted by the head native law officers. Four Courts of Circuit, superintended respectively by covenanted servants of the Company, each with their Mahomedan law officers, were in 1793 established for the trial of cases not punishable by the Magistrates.

Lord Cornwallis, moreover, differing from the Court of Directors, and deeming it incompatible with the principles of his system that

Separation of District Offices; Civil Judge and Magistrate remain united; Collector separated—1793.

revenue officers should decide on suits the cause of which, originating in their own department, might render them not wholly disinterested in the decision, annulled (1793) the judicial power of all officers of the revenue, and transferred the cognizance of all matters wherein the Government might be concerned to the courts of Dewanny Adawlut. A new Court of Civil Judicature was established in every district. The new Judge was a European Covenanted servant, of higher official rank than the Collector,* uniting in his person the powers of Magistrate as well as of Civil Judge, and controlling the police within the limits of his division. This arrangement long continued, one officer in each district being Judge and Magistrate, and another Collector.

To the Courts of Justice a Register and one or more Assistants were appointed from the junior branch of the European Covenanted Service. The Assistants were Assistants to the Judge and Magistrate in both capacities. As Assistants to the Magistrate they could be empowered by him to decide on cases to the same extent that the Magistrate himself was authorized under the Regulations of 1793. The Register was empowered to try civil causes not exceeding 200 rupees.

At the same time a Regulation was enacted authorizing the appointment of native Commissioners to hear and decide, in the first

Native Civil Judges; Moonsiffs—1793.

instance, on suits of personal property not exceeding the value of 50 rupees. These were of three descriptions, viz. *Ameens*, or referees; *Salisan*, or arbitrators; and *Moonsiffs*, or native justices. The referees and arbitrators were usually kazees appointed by virtue of their offices; the Moonsiffs were more carefully selected. They were not paid by fixed salary, but by commission on the amount of causes investigated by them. Appeals from their decision lay to the Civil Judge.

In order to ensure the hearing of appeals from the Judge, which

Four Provincial Courts of Circuit and Appeal.

had previously lain direct to the Governor-General at Calcutta, Lord Cornwallis established, by Regulation V of 1793, four Provincial Courts of Appeal. One was instituted in the vicinity of Calcutta, one at the City of Patna, another at Dacca, and the fourth at Moorshedabad, each Court being superintended by three Covenanted Civilian Judges. To these Courts a Register and one or more Covenanted Assistants were attached. An appeal lay from them to the Sudder Dewanny Adawlut, or Governor-General and Council in Calcutta, when the suit exceeded Rs. 5,000 in extent.

These Civil Courts were identical with the Courts of Circuit that were simultaneously appointed, and of which notice has been taken above. The same officers, European and Native, were attached to the Courts alike in their civil and criminal jurisdictions.

* The existing Collectors were in point of fact appointed Judges, while their head Assistants were appointed to the different Collectorates, for which, said the Government Minute, "they will be found sufficiently qualified."

The territorial jurisdictions of these Courts were as follows :—

(1) CALCUTTA DIVISION—

24-Pergunnahs, Burdwan, Jungle Mehals, Midnapore, Cuttack, Jessore, Nuddea, Hooghly; Foreign Settlements of Chinsurah, Chandernagore, and Serampore.

(2) DACCA PROVINCE—

Dacca, Mymensingh, Sylhet, Tipperah, Chittagong, Backergunge, Dacca Jellalpoore.*

(3) MOORSHEDABAD DIVISION—

Moorshedabad, Bhaugulpore, Purneah, Dinagepore, Rungpore, Rajshahye, Beerbhoom.

(4) PATNA DIVISION—

Patna, Ramghur, Behar, Tirhoot, Sarun, Shahabad.

The Governor-General and Council, who were at this period discharging the duties of both the *Sudder Dewanny* and the *Sudder Nizamut*

Adawlut, soon found that more of their time was occupied in these functions than could conveniently be spared.

Lord Wellesley, moreover, placed it on record that he deemed "it

Regulation II, 1801.

essential to the impartial, prompt, and efficient administration of justice, and to the permanent security of the purses and properties of the native inhabitants of these provinces, that the Governor-General in Council, exercising the supreme legislative and executive authority of the State, should administer judicial functions of Government by the means of Courts of Justice distinct from the legislative and executive authority." It was accordingly determined that the Government should relinquish the chief civil and criminal jurisdiction and place it in the hands of a Court of Justice, over which were to preside three Judges; the chief Judge being a member of the Supreme Council, and the other two selected members of the Covenanted Civil Service.

The *Sudder Court* remained as the Court of final appeal in this Presidency without any radical modifications until it was united with the Supreme Court in 1862, and both together were amalgamated into the present High Court. The *Sudder Court* was latterly composed of five or six Covenanted Civilians, more or less, as might be necessary.

The Supreme Court, which was an entirely separate institution, was governed by English law and administered by three Judges, Barristers-at-

The Supreme Court—1774.

Law, appointed by the Crown, of whom the chief was styled Chief Justice. The Supreme Court was established by the Letters Patent which the King was empowered in the Regulating Act to grant, and dated 26th March 1774. It had full local jurisdiction in Calcutta and

*The districts of Dacca Jellalpoore and of the City of Dacca were abolished by Regulation V of 1833 and formed into the single district of Dacca. Jellalpoore is the name of a *pergunnah* in the Furreedpore district. The original Dacca Jellalpoore included that *sillah*, and the headquarters of the district were in 1813 located at Furreedpore. In 1833 the independent Joint-Magistracy and Deputy Collectorate of Furreedpore was established, and was declared a full Magistracy and Collectorate on the reorganization of 1869.

also a personal jurisdiction over all persons in the employment of the Company, including zemindars, revenue farmers and contractors in the Mofussil. This extensive power led to confusion and injustice, and a new Act was passed in 1781, defining and limiting the powers of the Crown Court. In general terms it may be said that till its abolition the jurisdiction of the Supreme Court was confined to the limits of the city of Calcutta between the Hooghly and the Mahratta Ditch, and to the determination of all serious criminal cases in which European British subjects were accused and committed for trial. It was strictly interdicted by law from interfering in matters of revenue.

On the 14th May 1862 the High Court of Judicature in Bengal was established by Letters Patent. The High Court established—1862. The Sudder and Supreme Courts were abolished at the same time by Act 24 and 25 Vict., Cap. 104. The combined powers and authorities of the abolished Courts, and their jurisdiction, both over the provinces and the Presidency town, were vested in the High Court. On the 1st January 1866 fresh Letters Patent were issued, and further provision was made respecting the jurisdiction of the Court.

In 1795 laws were published for the newly acquired province of Benares. In 1805 the laws and regulations that had been established in the ceded and conquered provinces on the upper Ganges* were codified.

Changes in the constitution of the Board of Revenue. Board of Commissioners in the Upper Provinces—1807.

In 1807 (Regulation X) a Commission was constituted, consisting of two members, for the superintendence of the settlement of these provinces, and for the general control of the Collectors in the discharge of their several public duties. These Commissioners were vested in those provinces with all the authority that had hitherto been exercised by the Board of Revenue of Calcutta. By Regulation I of 1809 this Board of Commissioners in the Upper Provinces was declared permanent. At the same time all the powers that up to this period had been exercised by the Calcutta Sudder Board of Revenue in the province of Benares were transferred to the Board of Commissioners.

In 1816 (Regulation I) a separate Commissioner was appointed for the superintendence of the revenues of the province of Benares and that part of the province of Behar which was comprised in the zillahs of Behar, Shahabad, Sarun, and Tirhoot, and was vested with all the authority that had previously been exercised in these provinces by the Board of Revenue and Board

Board of Commissioners in Behar and Benares—1817.

* The province of Benares was added to the Company's dominions in 1795. By a treaty, bearing date the 20th November 1801, the Nawab Vizier of Oudh ceded the valuable districts of that province, which were officially known as the ceded districts in Oudh. The conquered provinces of the Regulations were conquered from the Mahratta Chieftains, Scindia, the Berar Rajah, and others. These provinces comprehend the principal part of the Doab, or tract of country between the rivers Ganges and Jumna; the country situated on the right banks of the latter river, from Delhi to near its confluence with the Ganges; and the modern province of Orissa.

of Commissioners respectively. By Regulation I of 1817 the authority of the Behar-Benares Commissioner was extended to the districts of Ramghur, Bhaugulpore, and Purneah. In the same year it was found advisable to appoint two Commissioners in place of the single officer. "The Board of Commissioners in Behar and Benares" was accordingly established, and as a special case the general revenues of Dinagapore and Rungpore were also entrusted to this Board. By Regulation I of 1819 the management of the revenues of Dinagapore and Rungpore were replaced under the Calcutta Board of Revenue. The powers of a single member of the Calcutta Board of Revenue to exercise any and all the powers of Board collectively, and the full powers of a commission of the Board into the interior, were also established under Regulation XIII of 1811. The powers thus granted were recently (in 1871) acted upon by Government, and each member of the Board is now empowered to exercise the full powers of the Board of Revenue.

By Regulation III of 1822 considerable changes were effected in these arrangements: (1) the duties, powers, and authority of the Board of Commissioners in Behar and Benares

Board of Revenue for the Lower Provinces—1822.

within the districts of Bhaugulpore and Purneah were vested again in the Calcutta Board of Revenue, which continued to exercise its powers in the districts subordinate to its authority, and was to be denominated the Board of Revenue for the Lower Provinces; (2) the duties, powers, and authority exercised by the Board of Commissioners in the ceded and conquered provinces within the southern and northern divisions of Bundelcund, and the districts of Allahabad and Cawnpore, were vested in the Board of Commissioners in Behar and Benares, which continued in like manner to exercise its power in the districts hitherto subordinate to its authority with the exceptions just named, and was to be denominated the Board of Revenue for the Central Provinces; and (3) the several districts of the

Board of Revenue for the Central Provinces.

ceded and conquered provinces, with the exception of the districts above specified, were to continue subordinate to the Board of Commissioners, which was to be denominated the Board of Revenue for the Western Provinces. In 1829, as will presently be explained, the powers of the several local Boards of Revenue were made over to the Commissioners of Revenue and Circuit under the control of a Chief or Sudder Board of Revenue at Calcutta.

Board of Revenue for the Western Provinces.

A Superintendent of Police was first appointed under Regulation X, 1808, for the divisions of Calcutta, Dacca, and Morshedabad, and under

Superintendent of Police.

Regulation VIII, 1810, similar arrangements were adopted for Patna, Benares, and Bareilly. These officers were abolished by Regulation I of 1829, and their duties were transferred to the Commissioners of Revenue and Circuit. Under Act XXIV of 1837 the Government was again empowered to appoint a Superintendent of Police, and

in such case the Commissioner was to cease to exercise any powers in regard to the Magistracy and Police. In Bengal a single Superintendent of Police was accordingly appointed. After a short experience, however, it was found advisable to exempt from his jurisdiction the extra Regulation Provinces of Assam and of the south-western frontier and the province of Orissa, and to replace them under the Divisional Commissioners. The division of Chittagong was similarly removed in 1850. On the 23rd March 1854 the Court of Directors sanctioned the abolition of the appointment and the transfer of his duties to the respective Revenue Commissioners.

It has been stated that under the Code of 1793 the Civil Judges were constituted Magistrates of their respective jurisdictions, and that the offices of Judge and Magistrate long remained united. The separation was not actually effected for nearly forty years, but in 1810 a permissive Regulation was passed (Regulation XVI of 1810), by which Government was empowered to make a distinct appointment of a Magistrate.

The system introduced by Cornwallis and Barlow lasted during successive administrations, with only

LORD WILLIAM BENTINCK.

Provincial Courts abolished. 1829.—
Commissioners of Revenue and Circuit:
their powers—judicial, revenue, and police.

the necessary modifications engrafted in it by time and circumstances; but under Lord William Bentinck extensive changes were again effected. By Regulation I of 1829 the executive officers of both police and revenue were placed under the superintendence of Commissioners of Revenue and Circuit, each of whom was vested with the charge of four or five districts. Lord W. Bentinck abolished the Provincial Courts, stigmatizing them "as resting-places for those members of the service who were deemed unfit for higher responsibilities." The Commissioners were appointed to go on circuit as Sessions Judges. The appointment of Superintendent of Police was abolished and vested in the Commissioner with the fullest police control. The Revenue Boards in the provinces were also abolished and their powers vested in the Commissioners under the control of the Sudder Board at Calcutta. The Commissioners were absolutely to superintend both the finance and the criminal justice of their different divisions.

These arrangements were not, however, found completely successful, and after a very few years the

Civil Judges vested with Sessions powers
—1831—1835.

Governor-General exercised his right of transferring the judicial powers of the Commissioners to the Civil Judges. It was declared (Regulation VII of 1831) competent to Government to invest the Civil Judges with full powers to conduct the duties of the Sessions, and by Act III of 1835 the Government was authorized "to transfer any part or the whole of the duties connected with criminal justice from any Commissioners of Circuit to any Sessions Judge, and to define the powers which shall be exercised by each respectively." Commissioners, however, still continued to hold judicial powers, and were occasionally so employed. But Regulation VII of 1831 and Act III of 1835 were both repealed by Act VIII of 1868, and under the present law Commissioners have no

such powers, as all Sessions Judges and officers invested with powers of Sessions Judges are appointed under the rules of the new Code of Criminal Procedure.

The Judges under Lord William Bentinck's arrangement held a jail delivery every month. But the Judges were also the Magistrates, and as such it became evident that they were unable to cope with their additional duties. It was considered (1831) necessary to divest them of their magisterial responsibilities, and these were accordingly transferred to the Collector. This was the creation of the present unit of the administration, the Magistrate and Collector, or executive head of each district.

Under Regulation VIII of 1833 the appointment of additional Judges was sanctioned, who were to perform any part of the duties of the District Judges to which they might be appointed.

In 1831 Lord William Bentinck established also a higher grade of native Judgeships. Previously to this period there had been in fact but two classes of native Judges, with very limited powers and small salaries. The higher class was known as "Sudder Ameens," the

lower as "Moonsiffs." The Moonsiffs, originally denominated Commissioners, had been appointed by Lord Cornwallis to relieve the pressure on the European Judges. In 1803 the office of Sudder Ameen was instituted, with a jurisdiction extending to suits of Rs. 100. In 1821, after some intermediate enlargement of the powers of both classes, the Moonsiffs had been empowered to try cases extending to Rs. 150, whilst the Sudder Ameen took cognizance of cases to the amount of Rs. 500. In 1827 the authority of the latter had been doubled. Lord Bentinck now established a superior class of judicial officers, known as Principal Sudder Ameens, with enlarged powers and higher salaries. They were subsequently authorized to try cases involving property to any amount, and an appeal lay from them to the European Judges. The Small Cause Courts in Bengal were established by Sir John Peter Grant under Act XLII of 1860. In 1867 the Judges of the Small Cause Courts and the Principal Sudder Ameens and Moonsiffs were amalgamated into one service. Small Cause Court Judges and Principal Sudder Ameens have since been called indifferently Subordinate Judges, and are eligible alike for Small Cause Court work or for the work of the ordinary Civil Court.

The office of Uncovenanted Deputy Collector was established under Regulation IX of 1833. The appointment was in the first instance open only to "natives of India of any class or religious persuasion," but was extended by Act X of 1843 to all persons of whatever religion, place of birth, descent, or colour.

Up to 1834 the whole of Bengal Presidency, including Benares and the ceded and conquered provinces of Upper India, were directly administered by the Governor-General of Bengal in Council. In 1834 the Governor-General in Council became Governor-General of India, and Bengal was then governed by the Governor-General in the capacity of Governor of Bengal without a Council. At the same time

power was given to create a separate Governor of Agra, which was shortly modified, a Lieutenant-Governor being substituted for a Governor in 1836. From this time the civil history of Bengal, Behar, and Orissa, becomes entirely separate from that of the Upper Provinces.

The machinery of the revenue administration and civil justice having been strengthened, the expediency of a more extensive employment of uncovenanted agency in the criminal branch of the Judicial Department forced itself into notice. But it was not till 1843 that an Act was framed by the Legislative Council empowering the Government to appoint in any district one or more uncovenanted Deputy Magistrates, with or without police powers as might be determined.

The union of the offices of Magistrate and Collector, as established under Lord William Bentinck, was however only of temporary duration.

Establishment of the Subordinate Executive Service—1843.
Separation of the offices of Magistrate and Collector—1837.

It so happened that at that time the business of a Collector became engrossing and onerous, while the duties of the Magistracy were comparatively disregarded. The additional work imposed by the operations for the resumption of revenue free tenures was treated as if it had been permanent. In 1837 Lord Auckland and the Court of Directors sanctioned the separation of the offices of Magistrate and Collector.

The progress of separation of the office of Magistrate and Collector went on gradually until 1845. In that year the magisterial and fiscal offices were disunited everywhere except in three districts of Orissa and in the independent Joint-Magistracies of Pubna, Muldah, Bogra, Bulloah (or Noakhally), Furreedpore, Bancoorah, Baraset, and Chumparun. The salaries of the separated Collectors were uniformly fixed at Rs. 23,000 a year, except in Bhaugulpore, Monghyr, and Beerbhoom, where they were Rs. 18,000; but the salaries of Magistrates, which it was intended at the time of separation should be in two grades of Rs. 18,000 and 12,000, were reduced in 1842, by order of the Court of Directors, to Rs. 10,800 per annum.

At this point may be noticed the creation of the Lieutenant-Governorship of Bengal. In 1854 the Government of Bengal was entrusted to a Lieutenant-Governor, and the personal connection with the Government of India, resulting from the union of the offices of Governor-General of India and Governor of Bengal, which had hitherto subsisted, ceased. Henceforth the Government of India and Bengal became entirely distinct.

In 1859 the offices of Magistrate and Collector were again united.

Reunion of Magistrates and Collectors—1859.

This reunion had been the subject of anxious deliberation in India for six years before it was finally resolved upon. The measure was strongly advocated by Sir Frederick Halliday, the Lieutenant-Governor of Bengal, by Lord Dalhousie, and by Lord Canning, and was as strongly opposed by Mr. Grant. It was sanctioned by Lord Stanley, who was then Secretary of State for India, in his despatch No. 15, dated 14th April 1859. He directed (1)

"that the offices of Magistrate and Collector, where now disunited in Bengal, should be combined in the same person, and that such of the covenanted officers as are now Magistrates, and are not absorbed in the higher office, should be employed as Joint-Magistrates and Deputy Collectors, but without any increase of salary; and (2) that the Joint-Magistrate in each district should ordinarily have the superintendence of the police under the general control of the Magistrate." These orders were rapidly carried out in all the districts of Bengal where the appointments were separate.

At the same time seven of the eight independent Joint-Magistracies already alluded to were established full Magistracies and Collectorates.

The independent Joint-Magistracies abolished.

At first these were offshoots from large districts, and were created as *quasi* sub-divisions in the early part of this century to stem the tide of crime and dacoity in localities so remote from the head-quarters station. The Joint-Magistrates of these sub-divisions, from exercising a joint-jurisdiction with the Magistrate of the district, gradually came to exercise independent criminal powers, but in revenue matters they never were invested with more than the powers of a Deputy Collector, and the land revenue always continued to be paid at the head-quarters treasury. Of these eight Joint Magistracies and Deputy Collectorates, four were upon Rs. 18,000 per annum, and four upon Rs. 12,000. At the time of the reunion of Magistrates and Collectors, Baraset was abolished and reduced to an ordinary sub-division.

The present Joint-Magistrates were created by Lord William

The present grade of Joint-Magistrates.

Bentinck in order to afford more efficient aid to the Magistrate-Collectors than could be given to them by mere Assistants vested only with the powers of an Assistant under the Regulations. Lord W. Bentinck established two classes of Covenanted officers subordinate to the District Officer—one, a Joint-Magistrate and Deputy Collector on a salary of Rs. 1,000 a month; the other a Head Assistant, on Rs. 700. The latter was abolished by Government order dated August 16th, 1836, and a second grade of Joint-Magistracy was constituted in its stead on the same salary, but with the full powers of a Joint-Magistrate and Deputy Collector. The first were appointed Magistrates when the separation of the offices had been resolved upon, and now correspond to our first grade Joint-Magistrates. The salary of the appointment, as has been intimated, was reduced to Rs. 900 a month in 1842.

In 1861, shortly after the reunion of Collectorates and Magistracies, the police was established as a

The Bengal Police Act, 1861.

separate department under the Magistrate; and District Superintendents and Assistant Superintendents of Police were appointed to discipline the force. An Inspector-General and Deputy Inspectors-General were placed at the head of the police to supervise and inspect the department.

Modification of grades of Magistrate and Collector—1860.

At this time the 36 regulation districts in these provinces were in charge of Magistrates and Collectors receiving the following salaries—

In 3 districts	...	..	Rs. 28,000 per annum.*
„ 22 „	...	..	„ 23,000 „
„ 7 „	...	..	„ 18,000 „
			„ 12,000 „

These salaries were local, the salaries of particular classes being attached to particular districts. To remove the administrative inconveniences which resulted from this arrangement, Sir John Peter Grant proposed in that year the following changes: firstly, that the salaries of Magistrates and Collectors be made *personal*, instead of *local*, by throwing these officers into grades; and, secondly, that there be only two instead of four such grades or classes of Collector and Magistrate and rates of salary. He provided for 20 Magistrate-Collectors in the first grade on Rs. 23,000 per annum; one Magistrate and one Collector at the 24-Pergunnahs, who, each of them drew the full salary of Rs. 23,000; and 15 Magistrate-Collectors in the 2nd grade on Rs. 18,000—altogether 37 officers. The separate appointments of Magistrate and Collector in the 24-Pergunnahs were amalgamated in April 1865 into a single first grade Magistrate-Collector. The number was thus reduced to 36. At the same time two officers were taken from the second grade and added to the first grade, and until the past year there were therefore 23 Magistrate-Collectors sanctioned in the first grades and 13 in the second grade. The modifications that have recently been effected will be noticed in the chapter of the report for the present year on the Changes of Administration.

All the above has reference to what are called the regulation provinces.

The Non-Regulation Provinces under the Lieutenant-Governor

NON-REGULATION PROVINCES.

of Bengal consist of (1) new conquests or cessions to which the Regulations were never extended; (2) tracts of country formerly subject to the general Regulations, but which were removed from their operation by special enactments; and (3) semi-independent or tributary estates administered in the Political Department.

Regulation X of 1822 established the principle that there were races of people within these territories entirely distinct from the ordinary population, and to whose circumstances the system of Government established by the general Regulations was inapplicable. Such were the mountaineers of Bhaugulpore, the Paharia community, for the reclaiming of whom special arrangements were carried out by Augustus Cleveland before the introduction of the regular system. The uncertain and semi-barbarous territory on

First deregulationizing law—Regulation X of 1822.

* These three officers were the Magistrate-Collectors of Pooree, Balasore, and Cuttack, who were Salt Agents as well.

the north-eastern frontier of Rungpore was deregulationized under Regulation X, 1822. The existing rules for the administration of civil and criminal justice were suspended, and a Commissioner was appointed with full power to conclude arrangements with the Chiefs, and to conduct the entire administration of the tract under the Governor-General in Council. This law is the germ of the present non-regulation administration.

Assam and its dependencies were annexed during the first Burmese war in 1824, and were formally ceded

ASSAM.

by the Burmese by the Treaty of 24th February 1826, but it was only by decrees that a regular administration was established there, Upper Assam not having been regularly occupied till a comparatively late date. The Commissioner of the north-east frontier became Commissioner of Assam.

The system of administration introduced immediately after the annexation of the province was very simple. For the administration of civil justice native courts were established, each having a president and three assessors, vested with the powers then exercised by the Sudder Amcens and Moonsiffs of the Regulation Provinces. Appeals from the Senior Panchayet Court, as well as all original suits beyond their powers, were cognizable by the Commissioner, and his decision was final.

In the administration of criminal justice, the Assistants were authorized to perform the functions of Magistrates, and to commit offenders to trial before panchayets* to be presided over by themselves. The panchayet gave a decision as to the guilt or innocence of the accused, and in all cases not involving a severer punishment than Magistrates were competent to award, the Assistants passed sentence. In more heinous cases the proceedings of the panchayet, with the opinion of the Assistant thereon, were forwarded to the Commissioner for final decision, and he was empowered to pass sentence of death for the crimes of murder and robbery attended with murder. In 1835 Act II of that year was passed, by which Assam was placed under the Sudder Court in regard to the administration of civil and criminal justice, and under the Board of Revenue in matters relating to the fiscal administration of the province.

In January 1837 a code of rules for the administration of Assam was promulgated by the Sudder Court with the sanction of Government. These rules, which were subsequently revised in 1847, formed the law of procedure in Assam and North-East Rungpore, or the district of Gawalparah, till they were superseded by the Civil and Criminal Procedure Codes. The Courts in Assam and Goalpara have always been guided by the spirit of the general regulations.

The Civil Procedure Code (Act VIII of 1859) was extended to Assam on the 26th April 1860, and the Criminal Procedure Code (Act XXV of 1861) was brought into operation from the 1st January 1862. Act V of 1861 (the Bengal Police Act) was introduced in 1862.

* This is the origin of the jury system of trial in Assam, which existed in that province long before the Criminal Procedure Code authorized the introduction of the system in the Regulation Provinces.

In 1839 an officer was added as Deputy Commissioner (since 1861 called Judicial Commissioner), who relieved the Agent of his duties as Civil and Sessions Judge. In 1843 there were only six Principal Assistants and three Junior Assistants in the province.

The subordinate officers in all the Non-Regulation Provinces were styled Principal Assistants, Senior Assistants, and Junior Assistants. In 1861 these officers were graded into Deputy Commissioners of the 1st, 2nd, and 3rd class and Assistant Commissioners. The Sub-Assistants, Additional Assistants, Extra Assistants as they were called in one province or another, were all styled Extra Assistant Commissioners.

The grades of Extra Assistant Commissioner as now constituted were sanctioned in 1868. The Assistant Commissioners who, from a very early date, were appointed to assist district officers in the non-regulation provinces, were placed on their present footing in 1867.

A Commissioner for carrying on the administration of the Cooch Behar estate was repeatedly appointed in the last century and the early part of the present century; finally in 1863 a Commissioner was appointed during the minority of the Rajah. In 1866 Cooch Behar was established into a Non-Regulation Commissionership; and Darjeeling, from the Bhaugulpore division, and Goalpara and the Garo Hills, which had been under Assam, were placed within the new jurisdiction. At the same time the northern portion of Rungpore was transferred to this division, and eventually was united with the submontane country ceded by the Bhuteas, forming the district of Julpigoree. In 1868 the judicial administration of the Goalpara district was placed under the Judicial Commissioner of Assam, the administration in other matters remaining with the Divisional Commissioner.

A part of the hill portion of the district of Darjeeling was ceded by the Rajah of Sikkim in 1838. The Morung low land under the hills, and another portion of the hills, were taken from him in 1850 in consequence of his having seized and detained in confinement the Superintendent of Darjeeling while travelling peaceably through his country. The portion of the hills known as British Bhutan was ceded by the Bhuteahs after the Bhuteah war in 1865, and annexed to Darjeeling.

The district was placed under the charge of an officer called Superintendent (the designation has since been changed to that of Deputy Commissioner).

The Criminal and Civil Procedure Codes were extended to Darjeeling in 1863. The police administration of the district was conducted under Regulation XX of 1817 until the 25th May 1864, when Act V of 1861 was introduced.

In 1824 the Burmese had invaded Cachar. The Rajah sought the assistance of the British, who expelled the Burmese and replaced him on the throne in 1826. In 1830 the Rajah died without issue, and, under the

terms of Treaty which had been drawn up in 1826, Cachar lapsed to the British Government. In August 1832 the district was placed under the Agent to the Governor-General in Assam. It was transferred to the Dacca division in 1838. Act VI of 1835 placed the district of Cachar under the Sudder Court and the Board of Revenue. From this time the courts in Cachar were guided by the spirit of the general Regulations and Acts.

Under orders of the Government of Bengal dated the 25th April 1859, the Superintendent was authorized to exercise the powers of a Political Agent to enable him to control the wild tribes on his frontier, and to decide without reference to Regulation law all disputes and other matters that may be submitted to him in connection with these people.

Some European British subjects occupied Nunklow in the Khasi Hill as early as 1826 under a treaty with the Rajah, and in 1835 a political agency was established there. In the same year the Jynteah territory was confiscated, and the Rajah of Jynteah was assigned a pension of Rs. 500 a month, which his successors still enjoy. The Rajah's authority in the Hills had, however, been little more than nominal, and for the next quarter of a century the people remained practically almost independent. In 1854 the administration of the Khasi and Jynteah Hills was subordinated to the Commissioner of Assam. In 1862 it was determined to impose a small tax as a token of our authority over the Sintengs or Jynteah people, whereon they broke out into a rebellion, which was only suppressed after a long and bloody war. A Deputy Commissioner was appointed for these tracts after the disturbances of 1862, and they have now become most peaceable subjects. In the petty dependent States the administration of civil and criminal justice, in cases when all the parties belong to the same State, is ordinarily still in the hands of their respective headmen, except in cases of homicide and murder. These latter cases, as well as all cases, civil and criminal, of every description in which British subjects are concerned, or in which all the parties are not inhabitants of the same state, are adjudicated by the Deputy Commissioner in his political capacity, and his decisions are subject to revision by, and generally appealable to, the Commissioner of Assam. The Deputy Commissioner has also a discretion to hold an inquest in any case of accidental death occurring within any of the political states. In the portions of the Hills which are absolutely British territory, the administration is conducted under rules laid down by the Lieutenant-Governor, the ordinary laws not being in force.

The Garo Hills, so far as they were known to, or dealt with by us, were attached to the district of Goalpara till the year 1866, when they were put under a separate officer. The measure has since been legalized by Act XXII of 1869, by which the executive Government has been vested with power to frame rules for the administration of the tract in question, as well as of certain other tracts of country to which the Act

may be extended by Government, such as the Khasia, Jynteah, and Naga Hills.

The Naga Hills were also at the same time placed under a separate officer, who was charged with the political superintendence of the Angamee Naga country.

NAGA HILLS.

The Hill Tracts of Chittagong were removed from the operation of the general regulations by Act XXII of 1860. The excepted tract was

HILL TRACTS OF CHITTAGONG.

placed under an officer called Superintendent (now Deputy Commissioner), and a few short rules prescribed for his guidance in the administration of civil and criminal justice and the collection of revenue, which are still acted upon. The Civil and Criminal Procedure Codes have not been extended to this tract.

The South-Western Frontier Agency was called into existence as a Non-Regulation Province, after the

CHOTA NAGPORE.

suppression of the Kolc insurrection in 1831-32, by Regulation XIII of 1833. By this Regulation portions of the Ramgurbh district, all the jungle mehals except Senpahari, Sherghur, and Bishenpore, and Dhulbhoom from the Midnapore district, were removed from the operation of the general regulations; and the administration of civil and criminal justice, the collection of revenue, the superintendence of the police, the land revenue, customs, excise, stamps, and every branch of Government of the excepted tracts, were placed under an officer called the Agent to the Governor-General. The Governor-General in Council was declared competent to prescribe any rules he deemed advisable for the guidance of the Agent and the officers subordinate to him.

Subsequently the Tributary Mehals noted on the margin* and Singbhoom were placed

* Sumbulpore, Sonapore, Sarungbu, Suktor, Gangpore, Bamra, Bonai, Rehracole, Raighur, Patna, Borasamber, Bindra, Nowagurbh, Khurriar, Phoolpur, Sirgoojah, Oodeypore, Jushpore, Korea, Chang Bhukur.

† Sirgoojah, Korea, Oodeypore, Chang Bhukur, Jushpore, Gangpore, Bonai.

under the Agent. Of these Tributary Mehals those which are noted† are still attached to the South-

Western Frontier Agency of Chota Nagpore Division, and the rest have been transferred to the Central Provinces. By Act XX of 1854 the designation of the officer in charge was changed from Agent to Commissioner, and of his province from South-Western Frontier Agency to that of Chota Nagpore. The Deputy or Judicial Commissioner, as he is now, was appointed in 1843. The other subordinate appointments were at that time two Principal Assistants on Rs. 1,000, two First Class Assistants on Rs. 750, and one Second Class Assistant on Rs. 500.

In 1833 a few short rules were issued by Government for the guidance of the Agent, which directed that, pending the issue of detailed instructions, the Agent and officers subordinate to him were to be guided by the "rules heretofore in force for the conduct of all local duties."

These criminal rules continued in force till they were superseded by the Criminal Procedure Code (Act XXV of 1861), which was extended

to the districts of the Chota Nagpore division when passed. It was subsequently held in 1864 that the Code was extended to so much only of the Singbhoom district as is comprised in Dhulbhoom and the Kolhan, the remaining estates being administered in the Political Department.

As regards the administration of civil justice, a set of rules was proposed by the Agent at the same time that criminal rules were laid before Government, but orders on them were suspended pending the promulgation of a Bill on the subject then under preparation. This Bill was never passed, and till Act VIII of 1859 was extended to the division there was no specific law or rule to guide the procedure of the civil courts in the province, but they followed the regulations, except in points where some order of the Agent interposed.

From the first creation of the agency the ordinary laws for the sale of land for debt or arrears of rent were regarded as inapplicable to the province, and the rules proposed by Captain Wilkinson provided that no sale or alienation, or even mortgage of hereditary or moveable property, was to take place without the sanction of the Agent. This rule has always been acted on as regards sales, and forms one of the most peculiar features of the agency; and in extending the Civil Procedure Code to the districts of Hazareebaugh, Lohardugga, and Maunbhoom, a proviso to this effect was added to the notification. The Code was not extended to Singbhoom, but is considered in force in Dhulbhoom of that district. The remainder of Singbhoom, *quoad* civil rules, is administered in the Political Department, as are the Tributary Mehals; the appeals from the Chiefs and Deputy Commissioner lying to the Commissioner, not to the Judicial Commissioner and High Court.

The inquiry into the causes of the Sonthal insurrection in 1855

SONTHAL PERGUNNAHS.

having brought to light the unsuitability of the regulation system to the tract of country now designated the Sonthal Pergunnahs, inhabited by the Sonthals and other rude tribes, who are far behind the Bengalees in civilization, these pergunnahs were exempted from the operation of the general regulations by Act XXXVII of 1855, except in regard to civil suits above Rs. 1,000 in value, the collection of revenue in permanently-settled estates, the sale of lands for arrears of revenue, &c.

The excepted tract was placed under the Commissioner of the Bhaugulpore division, assisted by a Deputy Commissioner and a number of Assistant and Extra Assistant Commissioners.

In 1856 a few simple rules for civil and criminal administration were laid down for the guidance of the Sonthal officers.

The rules in regard to criminal matters remained in operation till 1862, when the Penal Code was introduced; and although the Criminal Procedure Code was not formally extended to these pergunnahs, the Sonthal officers were directed to act in accordance with its spirit. The Sonthal Pergunnahs drifted more or less under the ordinary law and procedure of the regulation districts; the Rent Law, the Civil Procedure Code, the Stamp Act, and other Acts, were considered to be in force, and the Deputy Commissioner was practically transformed into a Judge.

In 1871, however, serious difficulties arose in Santhalia, and it was felt that the pergunnahs really required a peculiar and simpler form of administration than the rest of Bengal. The Lieutenant-Governor recommended that they should be deregulationized and brought within the scope of the Act 33 Vic., Cap. 3. This measure received the assent of the Governor-General and the Secretary of State, and a special regulation for the peace and good Government of the pergunnahs, under which they were entirely deregulationized and administered more in accordance with simplicity and former times, was sanctioned.

The Tributary Mehals of Cuttack were exempted from the operation of the Regulations by Sections 36, 13, and 11 of Regulations XII, XIII, and XIV of 1805. This exemption was recognized on the ground of expediency only, and it was held that there was nothing in the nature of the connection with the proprietors that would preclude their being brought under the ordinary jurisdiction of the courts if it should ever be thought advisable.

The office of Superintendent was established in 1814, and he was directed to endeavour to establish such control over the conduct of the zemindars as might prevent the commission of crimes and outrages.

Regulation XI of 1816 appears to be the only law by which the Superintendent was invested with any judicial authority, and by that law claims to inheritance and succession among the Rajahs are disposed of.

In 1821 the Government ruled that the interference of the Superintendent should be chiefly confined to matters of a political nature, to the suppression of feuds and animosities prevailing between the Rajahs of adjoining mehals, or between the members of their families, or between the Rajahs and their subordinate feudatories, to the correction of systematic oppression and cruelty practised by any of the Rajahs or by their officers towards the inhabitants, to the cognizance of any apparent gross violation by them of their duties of allegiance and subordination, and generally to important points which, if not attended to, might lead to violent and general outrage and confusion, or to contempt of the paramount authority of the British Government.

The Penal Code was declared applicable to the Tributary States by an order of the Government of India dated the 18th December 1860.

Under orders of the Government of Bengal dated the 11th March 1863, the criminal authorities were directed to be guided in their proceedings as closely as possible by the spirit of the Criminal Procedure Code. Section 13 of Regulation XIII of 1805 is still in force.

In the estates under the direct management of Government, viz. Bankee and Ungool, the Civil and Criminal Procedure Codes, as well as Act V of 1861, are in force.

The separation of the Government of Bengal from the Government of India and the North-Western Provinces has been already noticed in the course of this narrative, but it will be convenient to recite here more exactly the origin of the present Government.

The Bengal Presidency was divided into two portions by Act of

The constitution, origin, and extent of the Lieutenant-Governor's authority.

Sub-division of Bengal Presidency, 1834.

General of Bengal (created by

Governor of Agra.

Governor-General appointed Governor of Bengal.

either to appoint a Council to assist the newly-created Governor, or to leave the executive government to be administered by such Governor alone, and the Governors or Governors in Council were to "have all the rights, powers, duties, functions, immunities whatsoever, not in any wise repugnant to this Act, which the Governors of Fort St. George and Bombay in their respective Councils now have in their respective presidencies."

The Governor-General was also empowered to appoint a Deputy

Deputy Governor of Bengal.

Governor from among the ordinary members of his Council, who would be invested with all the powers and perform all the duties of the Government during his absence.

In 1835 another Act was passed which declared that whereas much difficulty had arisen in dividing Bengal into two presidencies, "and the same would be attended with a large increase of charge," the Court of Directors might suspend the execution of so much of the said Act.

By Section 2 the Governor-General in Council was authorized to "appoint a Lieutenant-Governor of the North-Western Provinces, now under the Presidency of Fort William in Bengal, and from time to time declare and limit the extent of the territories so placed under such Lieutenant-Governor, and the extent of the authority to be exercised by such Lieutenant-Governor."

This power of suspension was exercised, and the formal division

Lieutenant-Governor of the North-Western Provinces—1836.

of the Bengal Presidency into two separate and distinct presidencies, once arrested, has never been again carried out. On the 29th February 1836 the first Lieutenant-Governor of the North-Western Provinces was appointed "with the same powers as have heretofore been exercised by the Government of Agra."

Bengal remained under the Governor-General as Governor, his

Appointment of Lieutenant-Governor of Bengal—1854.

place during his occasional absence being supplied by a Deputy Governor appointed from among the members of his Council, till 16 and 17 Vic., Cap. 95, was passed. Section 15 of that Act continued the power vested in the Directors to make Agra a separate presidency or leave it under a Lieutenant-Governor, and Section 16 empowered them also to declare "that the Governor-General of India shall not be Governor of the presidency of Fort William in Bengal, but that a separate Governor shall be appointed, and until such Governor be appointed the Directors may authorize the Governor-General in Council to appoint 'any servant of the said Company who

shall have been ten years in their service in India to the office of Lieutenant-Governor, * * and to declare and limit the extent of the authority of the Lieutenant-Governor to be so appointed." The appointment by 21 and 22 Vic., Cap. 106, Section 29, is now made subject to the approbation of Her Majesty.

On the 12th October 1853 the Court of Directors authorized the appointment of a Lieutenant-Governor of Bengal, and in Home Department Resolution No. 415 of 28th April following, the Hon'ble F. J. Halliday was appointed first Lieutenant-Governor.

Paragraph 7 of this resolution fixed the territorial jurisdiction of the Lieutenant-Governor, which was to be "co-extensive with the jurisdiction which has heretofore been exercised by the Governor of Bengal, with the exception of the Tenasserim provinces, which, like the adjoining province of Pegu, shall be placed directly under the Governor-General in Council."

Paragraph 8 fixed the extent of his authority. It was to "correspond in all respects with the authority that has been exercised by the Lieutenant-Governors of the North-Western Provinces."

Practically the Lieutenant-Governor exercises the same powers in civil matters as the Governors in Council of Madras or Bombay, though subject in some respects to somewhat closer supervision by the Supreme Government.

FORM OF ADMINISTRATION.

THE province is divided into what used to be called Regulation and Non-Regulation districts; but in fact Administrative system. Regulation and Non-Regulation districts. most of the Non-Regulation Provinces are now subject to all modern laws, and practically differ only in this that the same officers administer both civil and criminal justice, there being no regular separate establishment of Civil Courts as in the Regulation Provinces.

There is this further distinction, that the appointments in these provinces are not reserved for the Civil Service and Military Officers, and uncovenanted servants are appointed to them at the discretion of the Government.

There are, however, a good many tracts which are still administered under a peculiar system. They may be divided into—

(1) Newly acquired territory to which the general regulations have never been extended; such as the Khasi and Jynteah, the Naga and Garo Hills, the Kolhan of the Western Hills, and the Bhutan Dooars states.

(2) Tracts of country inhabited by primitive races specially exempted from the operation of the Regulations to whom a less formal code of law is better adapted. Under this head are some outlying tracts of Assam, parts of the Garo Hills, the Sonthal Pergunnahs, the Hill Tracts of Chittagong, and the Tributary Mehals of Outtaok.

(3) Semi-independent or tributary estates administered or partly administered by British Officers, *e.g.*, the Tributary Mehals of Chota Nagpore and Cooch Behar. Special Regulations and Acts give the Lieutenant-Governor a very wide power of making rules for these territories and exempt them from the operation of the general law.

The capital of the province, Calcutta, has, like the other Presidency towns, a special organization of its own. In civil suits above a certain limit, as well as in all Sessions trials, it is under the original jurisdiction of a branch of the High Court, in which only English and

Irish Barristers and Scotch Advocates can practice. The Small Cause Court of Calcutta is of purely local jurisdiction, and is regulated by a special Act. A separate establishment of Police is under the control of a Commissioner. Criminal justice is administered by two stipendiary Magistrates of Police. In revenue matters also the city forms part of no district, though it is subordinate to the Commissioner of the Presidency Division. Customs and Stamps are under the direct superintendence of the Board of Revenue. The affairs of the municipality and Municipal taxation are managed by a Chairman and Board of Justices specially appointed for Calcutta.

The public Civil Service is divided into two classes, the Covenanted and Uncovenanted Civil Service. The former includes the civil servants who have entered into covenant with the Home

Government, whether nominated to the service by the old Court of Directors and passed through Hayleybury, or whether appointed after passing the open competition examination for the Service, which is now held yearly. The number of Covenanted Civilians employed in Bengal on the 31st March 1873 was 271, of whom 101 were from Hayleybury and 170 had entered the service after competitive examination. There were then four native gentlemen in the Bengal Covenanted Civil Service. The principal appointments that are at present held by Covenanted officers are, the Lieutenant-Governorship of Bengal, at least one-third of the Judgeships of the High Court, the Board of Revenue, the Regulation Commissionerships, the principal Secretariat appointments, the Registrarship of the High Court, the Legal Remembrancership, the Inspector-Generalship of the Jail and Registration Departments, the Collectorship and Deputy Collectorship of Customs, the Civil and Session Judgeships, and the District Magistrate-Collectorships, Joint-Magistracies and Assistant Magistracies of the interior.

The Uncovenanted civil servants include all other civilians under Government employ, and are for the most part those Europeans, East Indians, and Natives who have been appointed in this country without reference to the Secretary of State. Their allowances are fixed on a lower standard, and their responsibilities are, generally speaking, of an inferior class to those of the Covenanted Civil Service. The principal appointments held by Uncovenanted officers are the appointments in the Educational, Opium and Police Departments, the Small Cause Court Judgeships, Subordinate Judgeships and Moonsiffships, the Deputy Magistracies and Deputy Collectorships, the several appointments in the Non-Regulation Provinces, the special and rural Sub-Registrarships, and the appointments of Sub-Deputy and Canongoes that have recently been established. Most of these appointments are held by natives, but Europeans and East Indians are also eligible and have a considerable share of the subordinate appointments in the district executive and in the judiciary, as well as most of the appointments in the Police, Opium, Customs, and some other departments.

The Regulation Provinces are, with the exception of a few departmental appointments, exclusively officered by Covenanted or Uncove-

nanted Civilians. In the Non-Regulation Provinces Commissioned military Officers of the Staff Corps are more often employed on civil work. The annexed table shows the distribution of officers employed in the Non-Regulation Provinces during 1872, exclusive of Extra Assistant-Commissioners.

APPOINTMENT.	Sanctioned number.	Number held by Covenanted Civil-ians.	NUMBER HELD BY OFFICERS OTHER THAN COVENANTED CIVILIANS.			REMARKS.
			Military Officers.	Uncovenanted Officers.	Total.	
Commissioners	3	.....	3	.....	3	
Judicial Commissioners	2	.....	2	.....	2	
Deputy ditto... ..	20*	5	14	1	15†	* These include the Political Agents of Hill Tipperah and the Naga Hills.
Assistant ditto... ..	21	.....	17	4	21	† One of these is an Army Medical Officer.
Total	46	5	36	5	41	

N.B.—The proportion of Covenanted Civilians employed in the Non-Regulation Provinces of Bengal during 1872 was 12·2 per cent.

The following is a list of the principal gazetted officers who were employed on the 31st March 1873 in the executive administration of the country, in the administration of justice, in the ordinary duties connected with the collection of the revenue, and in the chief offices in the Police, Customs, Education, Registration, and other departments :—

Administrative staff.

Officers at the Presidency.

Lieutenant-Governor	1
Private Secretary and Aide-de-Camp	2
Secretaries, Under and Assistant Secretaries to Government	10
Judges of the High Court	12
Members of the Board of Revenue	2
Secretaries to Board of Revenue	2
Registrar of the High Court	1
Superintendent and Remembrancer of Legal Affairs	1
Collector of Customs	1
Deputy Collector of Customs	1
Superintendent of Stamps and Stationery	1
Inspector-General of Registration... ..	1
Inspectors of Registration Offices	2
Registrar of Deeds	1
Collector of Land Revenue, Excise, and Stamps, and Collector of Income Tax in Calcutta	1
Commissioner of Police	1
Chairman of the Justices	1
Deputy Commissioner of Police	1
Magistrates of Police	2
Inspector-General of Police	1
Personal Assistant to Inspector-General of Police	1
Deputy Inspectors-General of Police	2

Officers at the Presidency.—(Continued.)

Inspector-General of Jails	...	...	...	1
Sanitary Commissioner...	...	...	...	1
Conservator of Forests	...	...	...	1
Deputy Conservator of Forests	...	...	...	1
Master-Attendant	...	...	...	1
Deputy Master-Attendant	...	...	...	1
Judges of the Small Cause Court	...	...	...	6
Protector of Emigrants and Superintendent of Labor Transport	...	...	...	1
Director of Public Instruction	...	...	...	1
Inspector of Schools	...	...	...	1
Principals and Professors of the Presidency College, Sanskrit College, and Madrisa	...	...	...	25
Superintendent of Botanical Gardens	...	...	...	1
Meteorological Reporter	...	...	...	1

Regulation Districts.

Commissioners of Divisions	...	...	...	8
District and Sessions Judges	...	...	...	26
Additional Judges	...	...	...	4
Magistrates and Collectors, 1st grade	...	...	...	23*
Ditto ditto, 2nd „	...	...	...	13*
Joint-Magistrates and Deputy Collectors, 1st grade	...	...	...	22
Acting ditto ditto, ditto	...	...	...	5
Joint-Magistrates and Deputy Collectors, 2nd grade	...	...	...	11
Assistant Magistrates	...	...	...	109
Cantonment Magistrates	...	...	...	3
Deputy Magistrates and Deputy Collectors	...	...	...	186
Principal Judge of Small Cause Courts in Jessore and Nuddea	...	...	...	1
Subordinate Judges and Judges of Small Cause Courts	...	...	...	41
Moonsiffs	...	...	...	184
Assessors of Income Tax	...	...	...	3
Special Sub-Registrars	...	...	...	20
Rural Sub-Registrars paid by fees	...	...	...	30
District Superintendents of Police	...	...	...	39
Assistant ditto ditto	...	...	...	30
Inspectors of Schools	...	...	...	4
Principals and Professors of Colleges	...	...	...	23

Non-Regulation Districts.

Commissioners of Divisions	...	...	...	3
Judicial Commissioners...	...	...	...	2
Deputy Commissioners, 1st grade	...	...	...	4
Ditto ditto, 2nd	...	...	...	6
Ditto ditto, 3rd	...	...	...	6
Ditto ditto, 4th	...	...	...	4
Assistant Commissioners, 1st	...	...	...	7
Ditto ditto, 2nd	...	...	...	8
Ditto ditto, 3rd	...	...	...	6
Extra Assistant Commissioners	...	...	...	53
Deputy Magistrates	...	...	...	2
District Superintendents of Police..	...	...	...	11
Assistant ditto	...	...	...	10
Inspector of Schools	...	...	...	1

* These grades have been modified since the beginning of the year.

The unit of the executive administration, whether in Regulation or Non-Regulation districts, is the District Officer—in the one case styled

Executive administration.

Magistrate-Collector, in the other Deputy Commissioner. The Superintendents of Police are the right hand of the Magistrate. The ordinary district jails, while placed in the hands of an officer, usually the Civil Surgeon, selected for the duty, are under the general control of the Magistrate. A similar arrangement has been carried into effect in the department of education, but that forms the subject of separate treatment in this report. All District Officers are *ex-officio* Registrars. The Department Public Works, while placed in the immediate charge of the District Engineer, is under the Magistrate's general control. The District Officer is the executive chief and administrator of the tract of country committed to him, and is or ought to be supreme over every one and every thing, except the proceedings of the Courts of Justice. As District Magistrate he is also head of the department of criminal justice, which is charged with the summary trial of small cases, and the inquiry into greater cases previous to trial at sessions, although he generally rather distributes and superintends this work than does a large share of it himself.

At the disposal of the District Officer are the subordinate magisterial, police and revenue authorities. The District Superintendent of Police, who is the head of the police under the Magistrate, confines his attention to police administration and kindred subjects; but the subordinate Magistrates combine revenue with their magisterial functions. The sub-divisional officers, who are Assistant and Deputy Magistrates in charge of divisions of districts, exercise in their own jurisdictions the delegated power of the District Officer except in matters of police, over which they have only judicial and no executive control.

The Sub-Deputies and the sub-divisional establishments, which have recently been sanctioned to strengthen the executive influence of sub-divisional officers and to enable Magistrates to administer the country more completely, are the lowest stratum to which the executive Government can look; they are the agents of the superior executive officers in all departments.

Above the District Magistrates are the divisional Commissioners. Their duties are principally those of supervision; in almost all matters they exercise a general superintendence, and especially in the Revenue Department they keep a control over the Collector's proceedings. Commissioners are the channels of communication between the local officers and Government, sifting, collating and bringing together in a compact form the information they receive. In revenue matters the Commissioners are in their turn subject to the orders of the Board of Revenue, in Calcutta; in other matters they are under the Government direct.

The executive Government of Bengal is finally administered by the Lieutenant-Governor, aided by two Civil Secretaries and several Under-Secretaries, and by a Secretary in each of the Departments of Irrigation and Public Works. The Lieutenant-Governor has in his hands the whole internal management of the administration, and the patronage of the Covenanted and Uncovenanted Services is at his

absolute disposal. He has no Council, and exercises in his own person all the powers of Government. Under the decentralization scheme of the

Jails.
Registration.
Police.
Education.
Medical Services,
except regular Medi-
cal Establishments.
Printing.
Roads.

Civil Buildings.
Miscellaneous.
Public Improve-
ments.
Petty construction
and repairs of Im-
perial buildings in
the Civil Depart-
ment.

late Lord Mayo's Government, the powers and responsibilities in respect to the public expenditure in the marginally noted departments were made over to the local Governments under certain conditions. In the remaining branches of administration the power of the purse in respect of expenditure

is centralized in the Government of India, by whom grants to the local Government are made on detailed estimates of the needs of each department.

The legislative authority in Bengal is the "Council of the Lieutenant-Governor for the purpose of making Laws and Regulations,"

which was established in 1862 by the Governor-General in Council, under the powers conferred on him by Section 44 of 24 and 25 Vic., Cap. 67 (the Indian Council's Act). The Lieutenant-Governor is the President of the Council. He is empowered to nominate twelve Councillors, not less than one-third of whom must be non-official members, and their nomination is subject to the confirmation of the Governor-General. The authority of the Council extends over all the provinces, districts, and places which are administered by the local Government; but before any law comes into force, it must have received the assent of the Governor-General of India as well as of the Lieutenant-Governor of Bengal.

The restrictions to the exercise of its powers are as follows :—

"It shall not be lawful for the Lieutenant-Governor in Council, except with the sanction of the Governor-General previously communicated to him, to make regulations or take into consideration any law or regulation for any other purposes next hereinafter mentioned, that is to say:—

"(1.) Affecting the public debt of India, or the customs duties, or any other tax or duty now in force and imposed by the authorities of the Government of India for the general purposes of such Government.

"(2.) Regulating any of the current coin, or the issue of any bills, notes, or other paper currency.

"(3.) Regulating the conveyance of letters by the post office, or messages by the electric telegraph within the Presidency.

"(4.) Altering in any way the Penal Code of India as established by Act of the Governor-General in Council, No. 45 of 1860.

"(5.) Affecting the religion or religious rites and usages of any class of Her Majesty's subjects in India.

"(6.) Affecting the discipline or maintenance of any part of Her Majesty's military or naval forces.

"(7.) Regulating patents or copyright.

"(8.) Affecting the regulations of the Government with foreign provinces or states.

"Provided always that no law, or provision of law, or regulation, which shall have been made by any such Lieutenant-Governor in

Council, and assented to by the Governor-General in Council, shall be deemed invalid only by reason of its relating to any of the purposes combined in the above list."

A considerable part of the legislative enactments which affect Bengal still, therefore, proceeds from the Indian Legislature.

The revenues of the Presidency of Bengal are derived from the following principal sources,—the Land

Revenue administration.

Revenue, the monopoly of Opium, Excise on spirits and intoxicating drugs, Stamps, Salt, Income-tax (abolished since the close of the past year), and the Customs. Of these land revenue, excise, and stamps are, and the income-tax was, managed by the District Collector and his establishments, but the opium, customs, and salt revenue, are under special departments. The District Collector is controlled, as we have seen, by the Revenue Commissioner, who again is subject to the orders of the Member of the Board of Revenue in charge of the department. The Board consists of two Members, who are now each the heads of their own departments and exercise full powers independently of one another. The Senior Member, devotes his undivided attention to the great department of land revenue. The Junior Member has charge of all other sources of revenue. The opium branch of the revenue is under the management of two Opium Agents—the one stationed at Patna, and the other at Ghazee pore; but although the latter station lies in the North-West Provinces, both officers are subordinate to the Government of Bengal. They are aided by a local agency of principal assistants and sub-deputy agents. The general superintendence of the opium revenue, under the immediate direction of the executive Government, is vested in the Member of the Board in charge. At the head of the Customs is a special Collector, who is aided by one Covenanted and several Uncovenanted assistants. There is also a large body of Preventive Officers. The minor Custom Houses at Chittagong and Balasore are under the control of the local district officers.

The most important duties of the Marine Department refer to the management and pilotage of the port and river of Calcutta. The whole

Marine administration.

establishment is under the control of the Master-Attendant and a succession of assistants. The department engages a large share of the time and attention of the Government of Bengal. The port proper of Calcutta has now been entrusted under recent enactments of the Bengal Council to the Port Trust Commissioners, leaving the river Hooghly outside the port to be managed by the Marine officers of Government. The governing body of the Port Trust consists of twelve members appointed by the Government, most of whom are connected with the trade of the port.

Department of Public Works, Irrigation, Railways.

The ordinary Public Works are under a separate management from the Railways and Irrigation Works, which are special departments.

The highest officers of the Department of Public Works are nominated by the Government of India; the management of the State Railways and supervision of the Guaranteed Railways has also been

assumed by that Government. In the Department of Irrigation the local Government is principally the agent of the Government of India, by whom these great schemes have been devised.

Under the public works system the District Engineer, like all other local officers, while professionally responsible to his own department, is placed directly under the order of the Magistrate.

The administration of the Police and of Jails, Education and Registration, is under the general direction of the Government, supervised and inspected by a Director or Inspector-General in each department. The administration of the Medical Department through the Surgeon-General is now also directly under the local Government.

The existing (March 31st, 1873,) judicial organization of the Regulation Provinces in Bengal is as follows:—

High Court Judges	12
Civil and Session Judges of districts ..	26
Additional Judges	4

The functions of these officers are exclusively judicial, and include both civil and criminal jurisdiction. The Chief Justice and four of the Puisne Judges of the High Court are Barristers. Another of the Judges is a native gentleman who was a distinguished pleader of the Court. The rest are Covenanted Civil Servants.

Criminal justice is administered by the High Court, the Courts of Sessions, and the Courts of the various classes of Magistrates. The High Court on its original side tries by a single Judge, with a jury, all cases committed to it by the Calcutta Magistrates. On its appellate side the High Court, by a bench of two or more Judges, disposes of appeals in respect of convictions on trials before the Court of Sessions; it revises upon reference from Session Judges or Magistrates the decisions of inferior Courts when in error upon points of law; and it confirms, modifies, or annuls, all sentences of death passed by Sessions Courts in the interior. The district Courts of Session are presided over by a single Judge, who tries, with the aid either of juries or assessors, all cases committed by Magistrates empowered to that end, and decides sitting alone all appeals from the decisions of Magistrates of the first class when the sentence exceeds one month's imprisonment or 50 rupees fine. The powers of a Sessions Judge are limited only by the amount of punishment which may be inflicted for the offence under the Penal Code. The limits of the powers of a Magistrate of the first class in sentencing offenders are imprisonment, either rigorous or simple, up to two years, including solitary confinement up to three months; fine to the extent of Rs. 1,000, or imprisonment and fine combined, and whipping. The Magistrate of the district always exercises first class powers, and he also hears appeals from the Magistrates of the second and third class within the district. A Magistrate of the second class can award imprisonment up to six months, fine up to Rs. 200, or both, and whipping. A Magistrate of the third class can only imprison up to one month, or fine up to Rs. 50, or combine these punishments. Benches of Magistrates,

consisting of two or more Magistrates sitting together have now been appointed at most of the head-quarter stations and many of the sub-divisional stations in Bengal.

In respect of civil justice the High Court of Calcutta exercises an appellate, a legal and equitable, an ecclesiastical, an admiralty, and a bankrupt

Civil administration.

ruptcy jurisdiction. The functions which in England have hitherto been divided among different courts are here exercised in one Court and by the same Judges. Below the High Court are the District and Additional Judges, the Small Cause Court and Subordinate Judges, and the Moonsiffs, who are all Civil Judges.

The jurisdiction of a District Judge or Subordinate Judge extends to all original suits cognizable by the Civil Courts. The jurisdiction of a Moonsiff extends to all like suits in which the amount or value of the subject matter in dispute does not exceed one thousand rupees. An appeal lies from the High Court to the Privy Council in England if the value or amount of the subject matter exceeds ten thousand rupees. Appeals from the decrees and orders of District and Additional Judges lie to the High Court. Appeals from Subordinate Judges and Moonsiffs lie to the District Judge, except when the value of the subject matter exceeds five thousand rupees, when the appeal lies to the High Court. The High Court, with the sanction of the local Government, may also direct, when necessary, that appeals from the Moonsiffs may lie to the Court of the Subordinate Judge. The following suits are cognizable by Courts of Small Causes in the Mofussil, and when there is a Small Cause Court, are not cognizable in any other court:—"claims for money due on bond or other contract, or for rent, or for personal property, or for the value of such property, or for damages when the debt, damage or demand does not exceed in amount or value the sum of Rs. 500, whether on balance of account or otherwise: provided that no action shall be in any such Court (1) on a balance of partnership account, unless the balance shall have been struck by the parties or their agents; (2) for a share or part of a share under an intestacy or for a legacy or part of a legacy under a will; (3) for the recovery of damages on account of an alleged personal injury, unless actual pecuniary damage shall have resulted from the injury; and (4) for any claim for the rent of land or other claim for which a suit may now (in 1865) be brought before a revenue officer." There is no appeal from the order of a Small Cause Court.

Besides the regular Small Causes Courts, the Moonsiffs of twenty-five stations have been vested under the law with the powers of a Small Cause Court Judge for the trial of cases up to Rs. 50 in value.

By the Statute 53, Geo. III, Chap. 155, provision was made for the appointment of a single Bishop for the whole of India, and the Sovereign

Ecclesiastical Jurisdiction.

Bishop of Calcutta and Archdeacon of Calcutta, 1814.

was empowered to grant to the Bishop such ecclesiastical jurisdiction, and the exercise of such episcopal functions, as His Majesty might think necessary for the administration of holy ceremonies, and for the superintendence and good government of the ministers of the church

establishment. Under the authority of this Statute letters-patent for the Bishopric of Calcutta were issued under date the 2nd of May 1814, establishing the See of Calcutta subordinate to the Archbishopal See of the Province of Canterbury, and constituting the Archdeaconry of Calcutta. The Judges of the Supreme Court of Judicature at Calcutta and the Members of Council were appointed the King's Commissioners delegate to hear appeals from the decisions of the Bishop and his commissaries.

The Statutes 3 and 4, Will. IV., Chap. 85, empowered the Sovereign to found and constitute the Bishoprics of Madras and Bombay, and constituted the Bishop of Calcutta metropolitan Bishop in India. In 1835 the Bishoprics of Madras and Bombay were accordingly constituted by letters-patent, leaving the metropolitanical jurisdiction with the Bishop of Calcutta. The Statutes 3 and 4, Will. IV, Chap. 85,

Chaplains of the Church of Scotland,
1836.

also provided for the appointment of two Chaplains of the Church of Scotland to be inducted and ordained by the Presbytery of Edinburgh according to the forms and solemnities used in the Church of Scotland, and to be subject to the spiritual and ecclesiastical jurisdiction in all things of the Presbytery of Edinburgh.

By the Indian Christian Marriage Acts of 1872 the local Government exercises ecclesiastical jurisdiction in the power granted to it of giving licenses to ministers of religion to solemnize marriages, to appoint marriage registrars, and to license persons to grant certificates of marriage between Christians. In other respects the Lieutenant-Governor does not exercise ecclesiastical jurisdiction.

CHARACTER OF LAND-TENURES; SYSTEM OF SETTLEMENTS AND SURVEY.

THE decennial settlement of Bengal, Behar, and Orissa—by which last term was meant at that period only the tract of country lying between the Rupnarain and Suburnrecka rivers, and now included in the district of

LAND SYSTEM OF BENGAL AND BEHAR.
Development of Government revenue.

Midnapore—was commenced in the year 1789 A.D. and completed in 1790-91. In the latter year the total assessment amounted to sicca Rs. 2,68,00,989 (Company's Rs. 2,85,87,722), and this assessment was with no doubt some slight variation declared to be permanent in A.D. 1793. The settlement embraced, roughly speaking, the tracts of country now comprised in the divisions of Burdwan, the Presidency, Rajshahye, Dacca, Chittagong, Patna, and Bhaugulpore. It also comprised parts of the Hazarebaugh and Maunbhoom districts in the Chota Nagpore division, as well as Julpigorec, Goalpara, and Cooch Behar, which are now in the Cooch Behar division, but then formed part of the Rungpore Collectorate. The total assessment during the year 1871-72 of the same provinces amounted to Rs. 3,52,08,866.

The zemindars with whom the settlement was originally made were for the most part powerful men, whose authority extended over wide tracts of country, police and other powers being entrusted to them. Of these tracts they were by the settlement constituted the proprietors. But under the influence of debt and mismanagement these large zemindaries were speedily broken up. The Government demand was then one which left a margin of profit but small compared with that given to zemindars in modern days. The rights of the ryot to hold at customary rates were also secured by law, and the power of the zemindars over them was limited. There was wide-spread default in the payment of the Government dues, and extensive consequent sales of estates, or parts of estates, for recovery of arrears under the unbending system introduced in 1793. In 1796-97 lands bearing a total revenue of sicca Rs. 14,18,756 were sold for arrears of revenue, and in 1797-98 the revenue of lands so sold amounted to sicca Rs. 22,74,076. By the end of the century the greater portions of the estates of the Nuddea, Rajshahye, Bishenpore, and Dinagpore Rajahs had been alienated. The Burdwan estate was seriously crippled, and the Beerbhoom zemindari was completely ruined. A host of smaller zemindars shared the same fate, In fact

it is scarcely too much to say that within the ten years that immediately followed the permanent settlement, a complete revolution took place in the constitution and ownership of the estates which formed the subject of that settlement. The average annual collections from 1791 to 1798 amounted, however, to sicca Rs. 2,65,00,000, being only three lakhs short of the annual demand.

It was thought desirable to enable the zemindars better to realize their rents. In 1799 the new zemindars were vested with greatly increased power over the ryots, and again in 1812 further power was given them, so that for some 50 years of the present century they exercised a power over the ryots far greater than that given them by the original settlement of 1793.

Some additions were made to the revenue demand when the zemindars were relieved of police charges and otherwise, and in 1824-25 the demand had risen to sicca Rs. 2,79,95,710 or Company's Rs. 2,98,62,021. After that period the revenue expanded as resumptions of invalid revenue-free tenures proceeded under Regulation II of 1819. In 1828-29 the current demand was sicca Rs. 2,85,26,034, or Company's Rs. 3,04,27,770. Eighteen years later (in 1846-47) it had risen to Rs. 3,12,52,676, and after this period a fresh and very marked enhancement occurred, bringing the demand in 1848-49 up to Rs. 3,40,96,605. During the three years 1847, 1848, and 1849, no less than 6,198 estates were added to the revenue roll by resumption, and the revenue was otherwise swelled by escheats, the assessment of lands brought to light by survey, and resettlements of Government estates. After this the demand remained almost stationary up to 1856-57, in which year it appears at the slightly reduced amount of Rs. 3,37,38,783. In the following year it rose to Rs. 3,39,10,362, and from that time there has been a steady expansion, interrupted in the year 1866-67 only by the famine, up to Rs. 3,55,34,022, which represents the current demand for 1872-73.

In calculating the figures in the last paragraph, the revenue of the districts in the Assam and Cuttack divisions, and of the districts of Lohardugga, Singhbhum, Darjeeling, and the Bhutan Dooars, have been excluded, as none of those districts were covered by the settlement of 1789 to 1791.

The fluctuations in the total annual demand of revenue do not indicate the full difficulty of tracing the variations of the revenue roll. Those fluctuations are the net result of variations in the opposite directions of enhancement and reduction, and are therefore the measure of the difference of those variations, not of their sum. But in addition to this the number of estates on the Government revenue roll has been enormously augmented since the permanent settlement—*first*, by the admission to the roll of talukdars who succeeded in the claims preferred by them to hold their taluks independently of the zemindars through whom they had previously paid their revenue, and *secondly*, by partitions of estates. In the district of Jessore alone no less than 1,000 estates were added to the roll by the separate registration of taluks between the years 1796 and 1798. Partitions have occurred in two ways,—*first*, by the act of Govern-

ment or the courts of law, the object being to bring portions of estates to sale for arrears of revenue or private debts due from the proprietors; and *secondly*, at the instance of the proprietors themselves, under the permission accorded by Clause 3, Art. IX of the Proclamation of the 22nd March 1793. Partitions of the former class were carried to such an extent during the ten years which immediately succeeded the settlement as completely to disintegrate most of the large ancestral estates in the country. And the process of voluntary partition has been constantly carried on up to the present time, under the provisions of the law above referred to, and of the subsequent laws on the subject, the large majority of such partitions having been effected in the districts of the Patna and Bhaugulpore divisions. Every partition has of course added one or more estates to the number on the roll, and a large portion of the estates so added have been registered under new names. The result of all these operations has been a transformation of the revenue roll so complete, that it is almost impossible to establish in most districts the points of identity between the list of 1793 and that of 1872.

One main feature in the transformation is, however, conspicuous at a glance. The circumstances alluded to in the last paragraph have inevitably produced, together with a great multiplication of the number of the estates borne upon the revenue roll, a corresponding reduction in their average area. The figures subjoined, which exhibit a classification of estates according to area, are unfortunately not quite complete, owing to defects in the survey records of one or two districts; but they sufficiently illustrate the above remark, showing as they do that in 38 districts of Bengal Proper and Behar, out of a total number of 154,200 estates at present borne on the public books, 533, or '34 per cent., only are great properties with an area of 20,000 acres and upwards; that 15,747, or 10·21 per cent., range from 500 to 20,000 acres in area; while the number of estates which fall short of 500 acres is no less than 137,920, or 89·44 per cent. of the whole. In the district of Sylhet the original settlement was nearly ryotwar, and that of Chittagong special causes have produced the great disproportion observable between the numbers of large and small estates upon the roll; but in other parts a large number of petty estates shown in the list owe their separate existence to the causes already mentioned. In the Behar districts, where next to Sylhet and Chittagong the disproportion under notice is most remarkable, a large proportion of the estates seem to have been from the first comparatively insignificant in size, while there were, and are, some extremely large estates in that province. Subsequent partitions have contributed greatly to crowd the revenue rolls of these districts with petty estates. It must be explained, however, that in all districts a large proportion of the petty estates now shown are resumed rent-free tenures of a petty character settled with the holders. The present *average* areas of the estates in the Behar districts are, as shown by recent reports from the district officers, as follow:—In Gya, 620 acres; in Patna, 223 acres; in Shahabad, 523 acres; in Sarun, 150 acres; in Chumparun, 1,924 acres; in Tirhoot, 303 acres; in Bhaugulpore, 1,139 acres; and in Monghyr, 386 acres; but these figures are not so significant as those

shown in the table below, of the extent to which the sub-division of property has been carried in the part of the country under notice, the average being raised by the few great estates, exceeding 20,000 acres each, which exist in each district.

Classification of estates in Bengal according to area.

DIVISION.	DISTRICTS.	1ST CLASS. No. of very large estates of 20,000 acres and upwards.	2ND CLASS. No. of moderate estates from 500 to 20,000 acres.	3RD CLASS. No. of small estates under 500 acres exclusive of resumed lakhiraj estates under 20 acres.	REMARKS.
BENGAL.	<i>Western Districts.</i>				
	Burdwan	6	36	2,801	*The Collector of Hooghly is unable to classify the estates in his district, as the survey registrars have not yet been completed.
	Bancoorah	4	48	481	
	Beerbhoom	7	213	275	
	Midnapore	23	800	1,983	
	Hooghly with Howrah ...	*	*	*	
	Total ...	39	1,097	5,543	
	<i>Central Districts.</i>				
	24-Pergunnahs	11	330	1,476†	† 101 estates recently transferred from other districts are not shown, the areas not being given in the dows or being otherwise not ascertainable.
	Nuddon	47	560	1,137	
	Jessore	23	335	1,877	
	Total ...	81	1,234	4,490	
	<i>Presidency.</i>				
RAJSHAHYE.	Moorshedabad... ..	8	378	2,449	‡ As the survey papers of this district are incomplete, the Collector is unable to furnish the information.
	Dinazpore	22	407	251	
	Maldah	7	100	371	
	Rajshahye	15	8-5	1,165	
	Rungpore	20	283	248	
	Bogra	†	†	†	‡ As the survey papers of this district are incomplete, the Collector is unable to furnish the information.
	Pubna	6	187	674	
	Total ...	78	1,869	5,151	
	<i>Central Districts.</i>				
	Darjeeling	1	46	888	‡ As the survey papers of this district are incomplete, the Collector is unable to furnish the information.
	Julpigoree	5	9	57	
	Goalpara	12	7	8	
	Total ...	18	62	953	
	<i>Eastern Districts.</i>				
DACCAL.	Dacca	8	476	7,324	
	Furreedpore	7	164	2,817	
	Backergunge	46	604	4,618	
	Mymensing	40	4-8	6,820	
	Sylhet	14	556	53,368	
	Cachar ... ..	....	27	7,878
	Total ...	115	2,315	81,834	

DIVISION.	DISTRICTS.	1st CLASS.	2nd CLASS.	3RD CLASS.	REMARKS.
		No. of very large estates of 20,000 acres and upwards.	No. of moderate estates from 500 to 20,000 acres.	No. of small estates under 500 acres exclusive of resumed lakhiraj estates under 20 acres.	
CHITTAGONG.	<i>Eastern Districts—(Contd.)</i>				
	Chittagong	1	671	3,577	
	Noakhully	14	108	1,340	
	Tipperah	14	305	1,612	
	Total	29	1,082	6,435	
PATNA.	<i>BEHAR.</i>				
	Patna	2	540	5,606	
	Gya	25	2,120	2,443	
	Shahabad	28	2,068	2,048	
	Tirhoot	6	974	12,452	
	Sarun	3	570	2,951	
	Chumparun	6	105	695	
	Total	70	7,076	26,255	
BHAUGUL-PORE.	Monghyr	10	354	1,914	
	Bhaugulpore	24	514	3,022	
	Purneah	18	73	1,524	
	Total	52	941	7,000	
CHOTA-NAGPORE.	<i>CHOTA NAGPORE.</i>				
	<i>South-West Frontier Agency.</i>				
	Hazareebaugh	17	61	164	
	Lohardugga	5	2	.....
	Singbhoom	3	.....	.....
	Manbhoom	26	8	.....
	Total	51	71	164	
	GRAND TOTAL	533	15,747	187,920	

It has been seen from the figures which were given in the first paragraph of this chapter that the increase in the Government revenue of the permanently-settled tracts in Bengal, during the period which has elapsed since the decennial settlement of 1789-91, amounts to Rs. 66,21,144. Of this sum no less than Rs. 40,40,965, or nearly two-thirds, has been obtained in the Behar province. In 1790-91 the total revenue of Behar amounted to sicca Rs. 53,09,181 (Company's Rs. 56,63,126); in 1812-13 it had risen to sicca Rs. 61,25,380 (Company's Rs. 65,83,739). And the demand from the Patna and Bhaugulpore Divisions (exclusive of the district of Purneah*) in 1871-72 was Rs. 97,04,091. The district officers have in vain attempted to give a detailed account of the reasons of this remarkable enhancement. On

* The pergunnah of Dhurrampore in Purneah was included in the Behar province at the time of settlement, and its revenue, amounting in 1812-13 to Rs. 2,44,766, is included in the earlier figures in the text. This by so much enhances the increase of revenue noted.

examining their records they have found their powers of calculation baffled by the constant transfers of territory that have taken place among the various districts in the province. Since the settlement of 1789-91 three new districts have been constituted in Behar, viz. Patna, Chumparun, and Monghyr, and all the districts in the two divisions appear to have expanded and contracted under successive administrative changes with a frequency which would greatly impede the inquiry, even if the record of those changes were complete. But unfortunately this record is far from complete, and it is therefore impossible to accomplish the first step in the necessary analysis. Assuming, however, that the transfers have on the whole nearly balanced each other, or, in other words, that the two divisions as a whole (excluding Purneah) have not, as it appears in point of fact that they have not, received any large accession of territory from the surrounding provinces, it would seem that the gross enhancement of revenue is mainly due to the causes already enumerated in paragraph 5, especially to resummptions of invalid rent-free and other lands under Regulation II of 1819 and III of 1828, which were actively carried on in Behar between 1830 and 1850. The increase of revenue in Bengal Proper since the decennial settlement has been Rs. 25,80,179 only—an amount not in excess of what might reasonably be expected in so large an area.

The revenue of the permanently-settled estates of Bengal has for years been realized with great punctuality. Losses sometimes occur through famine, epidemics, the devastations of cyclones, and other calamities of season; but under the conditions of settlement no such pleas can be urged as excuses for non-payment, and as a rule the large present excess of the annual rental over the Government demand enables the present landholders to meet that demand even in the most disastrous years. When, however, a land-owner cannot pay, the estate comes to sale for arrears, and then it depends upon its actual value in the market whether the price realized will cover the amount due to Government. If the debt be not cleared off, the defaulter is open to other processes for the recovery of the remainder, which is in but few cases so recovered. Small losses to Government occur from time to time in this way. In other cases estates, usually small ones, come to sale for arrears in consequence of desertion of ryots or of diluvion and sometimes of fraudulent transfer of land, and no bidders are found for them. These have to be bought in by Government and settled as the revenue authorities best can settle them. Many almost valueless estates come in this way into the hands of Government. Some are settled, permanently or temporarily, at a revenue far below those they originally bore on the revenue roll. Others, after all attempts at settlement had failed, have been sold to the highest bidders in revenue-free tenure. In this way Government has frequently suffered losses of permanently-settled revenue; but these losses are more than made up for by accessions from freshly assessed alluvion and occasional resettlements of Government estates at a higher revenue than that which they originally bore. It would also seem proper, in estimating the gains to be set off against the losses under observation, to take into account the annual

value of the capital sums which have been realized by the sale of Government estates, such sums representing the market value at the time of sale of the prospective proprietary profits from the estates so sold, and being therefore a distinct gain to Government, which continues to receive after the sale the full annual revenue assessed upon the estates.

A primary object of the framers of the permanent settlement was to record all rights in the land. It was directed under the Regulations of 1793 that a general register of estates should be kept up, and to facilitate this a register of intermediate mutations. The intention was that every fifth year the general register should be rewritten. In point of fact, however, the registers have never been kept up in such a manner as to be really useful in any district in Bengal. Practically speaking, there is now no obligation enforced on zemindars to register transfers of their estates; registration is only effected when it may suit the parties to observe the law, and the penalty for disobedience prescribed by the law is never enforced. The existing registers do not tell us who the zemindars are, and they give no information at all of under-holders or ryots. This evil, and the means of remedying it, have been more than once under consideration, and the matter is still before Government. The registers required in the assessment of the Road Cess have made a commencement of a new registration of tenures in some districts.

By the same Regulations all zemindars were required to maintain putwarics, and to file their accounts with canoongoes. The functions of the latter officer, who was appointed by Government, were to keep the public accounts and to receive the returns and registers of the zemindars and other local officers who collected the public revenue. The canoongoe was appointed for each estate or pergunnah. The putwari occupied the lower grade in the local agency, and performed the duties of a village accountant. The canoongoes were district Registrars; the putwarics were official village accountants. English ideas of the rights of a landlord and of the advantage of non-interference afterwards began to prevail in Bengal. The executive more and more abrogated the functions of recording rights and protecting the inferior holders, and left everything to the judicial tribunals. The putwarics fell into disuse or became the mere servants of the zemindars: the canoongoes were abolished. In 1815 the Court of Directors took up the matter afresh, and directed the introduction of measures by which the putwarics should be transformed from zemindari to Government servants, and be paid from public funds. Objections, however, were raised, and the scheme fell through. The putwarics remained as they were; but it was determined to appoint canoongoes to supervise them and make their accounts available for reference by the Courts and the revenue officers of Government. Regulations regarding putwarics and canoongoes were passed in 1817-18-19, and Regulation I of the latter year provided for the re-establishment of canoongoes and defined the position and duties of putwarics; and throughout Bengal, with the exception of few districts, canoongoes were appointed. Success, however, does not appear to have attended even these measures. The

Bengal revenue authorities were opposed to the arrangement. In 1827 the Board reported that the canoongoes had effected but little towards the main object of their appointment, and that their action met with systematic and determined opposition from the landholders, who in most cases failed to appoint putwaries, or, when they did appoint them, refused to pay their allowances, dismissed them without warning, and did not allow them access to their real records. The Board of Revenue themselves persistently opposed the whole system, and though the Government of India never conceded the point, they managed by passive resistance to defeat all action until canoongoes dropped out everywhere but in Orissa, and putwaries were discouraged, and as far as possible extinguished.

As a result of the policy of non-interference in Bengal, there were no tehsildars or other native revenue officers in the interior of districts, and up to the present year there were no revenue establishments whatever out of the Collector's office.

The record of all rights, which was required by the old system, is now being partially supplied by the returns submitted under the Road Cess Act, which is already to a great extent a register of tenures in Bengal. Efforts are also being made to revivify the putwaries. The Supreme Government has lately consented to the organization of the Orissa canoongoes at some increase of expense to the State, and the whole of Orissa is now parcelled out into canoongoe jurisdictions, while the putwaries are being regularly registered and recognized. In Behar the putwari has retained more vitality as a village institution, and the policy of the last two years has done much to strengthen his position. On all lands which come under settlement, on all Government estates and Wards' estates, efforts are being made to record the functions and emoluments of the putwaries, and to reconstitute them on their former footing. In the new Sub-divisional establishments which have been recently sanctioned, and are described in another chapter of this report, one of the officers is called canoongoe to make the system so far correspond with the old system. The best endeavours of Government are now being directed to making a commencement towards rescuing these territories from their present want of system, and to afford the ryots necessary protection.

The security of the Government revenue depends at present upon the operation of the Sale Law. The average annual number of sales of whole estates during the last ten years has been 686, giving an average annual proportion of sales to estates of 312 per cent. only, and the proportion of sales caused by *bond fide* inability to meet the Government demand is even much smaller than this. Under the Sale Law of 1859 shareholders and sub-holders were permitted under certain conditions to obtain separate registry so as to protect themselves from the effect of sale due to the default of others, but advantage has not been taken of these provisions to the extent that was expected.

According to the provisions of the old Regulations, the Government originally undertook the management of the estates of minors or incapable proprietors with the object of securing its own revenue, but it is now notorious that Government interference on this score is unnecessary, and

Security of the revenue.

Wards' estates.

revenue officers, who now take charge of these estates, have hitherto made it their principal business to extricate a Ward's estate from any difficulties into which it may have fallen, and to hand it over to its owner, not only relieved of all embarrassments, but with a large accumulated balance as well. There are now 104 Wards' estates under management, and some of them have very large rentals. It seemed to the present Lieutenant-Governor that if we were to undertake the management of these estates, we ought to reform in one way as well as in another; that the gratuitous labour of Government officers and the authority of Government should not be given solely to increase the rents; and that if we managed the estate at all, we should make it, as far as possible, the model of what a well-managed estate ought to be—a model not only in respect of the strict exaction of the rights of a landlord, but also in regard to the performance of the duties of a landlord. The services of the Board of Revenue and of the Commissioners and Collectors, to whose supervision the improvements to the estates are mainly due, are given without any cost whatever to the estates under management, and the Government stewardship would be discharged none the less faithfully if we spent some of the surplus revenues of rich estates in improving the condition of the people, and of making Wards' estates models for the imitation of all landlords in the surrounding districts. His Honor has accordingly desired that for the future the settlements of Wards' estates should be made as nearly as the circumstances will permit on the same principles as the settlement of Government estates; that instead of being leased to mercenary rent-farmers, the lands should, as far as possible, be settled with residents, with the ryots, or with their representatives, and that the general well-being of all parties should be studied in the management of these estates.

At the permanent settlement Government, by abdicating its position as exclusive possessor of the soil, and contenting itself with a

Subordinate tenures.

permanent rent-charge on the land, escaped thenceforward all the labour and risks attendant upon detailed management. The zemindars of Bengal Proper were not slow to follow the example set them, and immediately began to dispose of their zemindari in a similar manner. Permanent under-tenures, known as patni tenures, were created in large numbers, and extensive tracts were leased out on long terms. By the year 1819 permanent alienations of the kind described had been so extensively effected, that they were formally legalized by Regulation VIII of that year, and means afforded to the zemindar of recovering arrears of rent from his patnidars, almost identical with those by which the demands of Government were enforced against himself. The practice of granting such under-tenures has steadily continued, until at the present day, with the patni and subordinate tenures in Bengal Proper and the farming system of Behar, but a small proportion of the whole permanently-settled area remains in the direct possession of the zemindars. In these alienations the zemindars have made far better terms for themselves than the Government was able to make for itself in 1793. It has rarely happened that a patni, or even a lease for a term of years, has been given otherwise than on payment of a bonus, which has discounted the contingency of many years'

increased rents. It is a system by which, in its adoption by the zemindars, their posterity suffers, because it is clear that if the bonus were not exacted a higher rental could be permanently obtained from the land. This consideration has not, however, had much practical weight with the landholders. And if a gradual accession to the wealth and influence of sub-proprietors be a desirable thing in the interest of the community, the selfishness of the landholding class is not in this instance of it a subject for regret.

The process of subinfeudation described above has not terminated with the patnidars and izaradars. Lower gradations of sub-tenures under them, called dar-patnies and dar-izaras, and even further subordinate tenures, have been created in great numbers. And not unfrequently, especially where particular lands are required for the growth of special crops, such as indigo, superior holders have taken under-tenures from their own tenants. These tenures and under-tenures often comprise defined tracts of land; but a common practice has been to sublet certain aliquot shares of the whole superior tenure, the consequence of which is that the tenants in any particular village of an estate now very usually pay their rents to two, or many more than two, different masters, so many annas in the rupee to each. It must be added that in many cases where an estate or tenure has been sublet, the lessor has reserved certain portions, generally those immediately contiguous to his residence, in his own possession. These he may cultivate by keeping ryots upon them, or, especially if he be a European indigo-planter, by hired labour.

All the under-tenures in Bengal have not, however, been created since the permanent settlement in the manner above described. Dependent taluks, ganties, howalas, and other similar fixed and transferable under-tenures, existed before the settlement. Their permanent character was practically recognized at the time of the settlement, and has at any rate since been confirmed by lapse of time.

In addition to all these tenures, the country is dotted over with small plots of land held revenue-free, the large majority of them having been granted by former Governments, or zemindars under those Governments, as religious endowments,—grants which have since been recognized and confirmed by the English Government.

The general provisions of the Regulations of 1793 were in favour of the tenant. The theory of the permanent settlement was to give to all under-holders, down to the ryots, the same security of tenure as against the zemindars which the zemindar had as against the Government. Sub-holders of talooks and other divisions under the zemindars were recognized and protected in their holding, subject to the payment of the established dues. As respects the ryots, the main provisions were these: all extra cesses and exactions were abolished, and the zemindars were required to specify in writing the original rent payable by each ryot at the pergunnah at established rates. If any dispute arose regarding the rates to be so entered, the question was to be “determined in the civil court of the zillah in which the lands were situated, according to the rates established in the pergunnah for lands of the same description and quality as those respecting which the dispute arose.” It was further provided that no zemindar should have power

to cancel the leases except on the ground that they had been obtained by collusion at rates below the established rates, and that the resident ryots should always be entitled to renew pottahs at these rates. In fact fixity of tenure and fixity of rent-rates were secured to the ryots by law. It has already been pointed out that provision was made for canoongoes and putwaris, an object of whose appointment was declared to be "to prevent oppression of the persons paying rent." On behalf of the ryots it was a record of rights only that was wanting. The status that was designed for the tenantry was, however, much impaired, and in great part destroyed by the great powers subsequently given to the zemindars under the old *hufium* (seventh) and *punjum* (fifth) regulations, with a view to enable them to realize their rents. Under the *hufium* process (Regulation VII of 1799) the person of the ryot could be seized in default; under the *punjum* process (Regulation V of 1812) his property could be distrained, and in either case the proceedings commenced by what has been described as a strong presumption, equivalent to a knock-down blow against the ryot. The whole rent law was rescinded by Act X of 1859. The law of 1859 reduced the powers exercised by the zemindars themselves, while it increased the grounds of enhancement and afforded the remedy of a summary process before Deputy Collectors, who were, however, often very insufficiently qualified. Rent-suits are now transferred to the civil courts; they are better tried, and the rights of the ryots are more respected than they were; but, on the other hand, there are now good grounds of complaint, that there is difficulty in quickly realizing undisputed rents by legal process.

In Assam and Cachar, in the Himalayan slopes to the north of

Waste lands.

Bengal, in the terai at the foot of the Himalayas, on the uplands behind

Chittagong, and in the Soonderbuns or jungle tract between the cultivated districts of the Gangetic delta and the Bay of Bengal, there are large uncultivated wastes which belong to Government. So far as they are not to a small extent occupied by aboriginal tribes and scattered settlers, these lands have in past years been leased and sold and granted to settlers in one of two methods, viz. either in accordance with the sale rules, known as the fee-simple, or Lord Canning's rules of 1861, or in accordance with the practice sanctioned by Government, which allowed collectors of certain districts a discretion in giving cultivation leases of certain waste lands.

Lord Canning's well-known minute of the 17th October 1861 laid down three main principles on which grants of waste lands were to be made in future. These were *first*, that "in any case of application for such lands they shall be granted in perpetuity as a heritable and transferable property, subject to no enhancement of land revenue assessment;" *second*, that "all prospective land revenue will be redeemable at the grantee's option by a payment in full when the grant is made, or, at the grantee's option, a sum may be paid as earnest at the rate of 10 per cent., leaving the unpaid portion of the price of the grant, which will then be under hypothecation until the price is paid in full;" and *third*, that "there shall be no condition obliging the grantee to cultivate or clear any specific portion after grant within any specific time." The minimum price for the fee simple was paid at Rs. 2-8 or 5

shillings per acre, so that by paying 10 per cent. of this, or 6*d.* per acre, a title was obtained. Moreover, many large tracts were obtained by speculation in anticipation of measurement for a merely nominal payment. A despatch from the Secretary of State subsequently required, in addition to these provisions, that grants should be surveyed before sale, and that all sales should be by auction to the highest bidders above a fixed upset price.

There are besides these the following sets of waste land rules which have been at different times sanctioned for the whole or parts of Bengal:—

Rules for the grant of waste lands in the Soonderbuns, issued in 1863.

Rules for the grant of waste lands in Darjeeling, dated 1859.

Rules for the sale of waste lands in the Assam and Dacca divisions.

The old Assam waste land lease rules of 1854.

The new Assam settlement rules which leave a wide discretion as to the terms in which waste land shall be leased to ryots.

It is unfortunately the case that in granting waste lands under the above rules many abuses have been allowed to occur. There was a great rush upon tea planting; speculators bought upon credit Government wastes wherever they could get them, and Government officers were so far carried away by the mania that they relaxed the rules as to surveying wastes before they were sold, and in other particulars. It followed that large areas of wastes were sold to jobbers, who transferred them at a profit, or threw them up if they could not do that; while in many cases cultivated lands, not regularly settled, were sold as "Government waste lands" over the heads of the occupiers. In other cases lands beyond the British border; in others again, valuable forest lands, were sold under the waste land rules. Before Sir George Campbell came to Bengal, attention had been directed to this matter, and in Chittagong especially mistakes had been recognized. There had in more than one instance been risk of grave disturbance with frontier tribes on account of ill-judged sales of waste land in the occupation of border people. To prevent complications the Lieutenant-Governor has published *ad interim* rules which have received sanction, and orders have been passed that no more land shall be sold revenue-free in perpetuity without the previous sanction of the Government of India, excepting any such small plots not exceeding 10 acres in extent as may be required for buildings or gardens. The whole question is now under the consideration of the Supreme Government.

The provinces of Orissa and Assam present peculiar features of land tenure which are explained below. One or two of the districts also, such as Sylhet and Chittagong, and the districts in the Cooch Behar division, are exceptional in their land system.

The province of Orissa was conquered by the Moguls about the year 1580, and from that time the long

SPECIAL ACCOUNT OF ORISSA.

Historical and geographical notice.

strip of cultivated land which lies between the western mountain tracts and the sea-board marshes, and from which the conquerors derived their revenue, became known as the

Mogulbandi. The encircling tracts, in which the Orissa chiefs maintained a semi-independence, were called the Rajwara. The Mahrattas subsequently overran the province, and Orissa, as made over to the East India Company in 1760, was confined to the territory now occupied by the Midnapore district and a part of Hooghly. The rest of the province was recovered by the English from the Mahrattas in 1803.

The Mahrattas imposed on the Rajah of Khurda, and all the "khundaits," as the subordinate feudal chiefs were called, a quit-rent. This the Government frequently had to levy at the point of the sword; and one result to the opposition raised to its payment was the complete subjection and assessment at full rates of the estates of nearly all the smaller khundaits. These estates existed principally in the eastern Rajwara, and when the province was conquered by the British, their number was fifty. They were assessed at full rates and reduced in all respects to the condition of ordinary landholders, though some of them retain to this day their old title of khundait and keep up small guards of retainers. The rights of the Rajah of Khurda, and of all the principal khundaits to hold their estates at permanent quit-rents, were recognized by our settlement officers and by Government. The remainder were left in the position of semi-independent tributary estates, and a superintendent was appointed to keep himself informed of their proceedings, levy the quit-rents due from them, and put a check upon any revival of their old turbulent and predatory habits. The engagements entered into by Government with the khundaits of the independent and dependent estates were notified, and the principles upon which the Mogulbandi was to be settled were affirmed by Regulation XII, 1805.

In reference to the large estates incorporated in British territory, it is sufficient to say that by Sections 33 to 35 of the Regulation alluded to they were permanently settled at fixed rents. The arrangement was, however, immediately upset in respect to the most important of them, Khurda, the Rajah of which was dispossessed, and his lands resumed for rebellion. Khurda has ever since been held under direct Government management, the Rajah receiving an annual pension of Rs. 25,600.

Excepting these large estates the permanent settlement was

Settlement.

not extended to the remainder of the province. Sections 4 to 7, Regulation

XII, 1805, confirmed, with certain modifications, the terms of a proclamation which had been issued in September of the previous year by the Special Commissioners deputed to settle the province. A series of ten short temporary settlements followed the proclamation, the last of which expired in 1837. A thirty years' settlement was then concluded, which expiring in 1867, was renewed without alteration for a further period of thirty years, and is therefore now in force.

The settlement of 1838 was based upon a careful field measurement and upon an investigation into the individual rights of each landholder and under-tenant. It was a work of great labour, and occupied nearly eight years. The system was to settle the revenue payable by each of the old ryots and then to give a settlement to a superior landholder who collected the revenue from them.

The total Government revenue of the temporarily-settled tracts in Orissa is Rs. 13,36,725. The people are on the whole tolerably prosperous, though more subject to overwhelming calamities of season than those of perhaps any other province in India. They have wonderfully recovered from the devastation of the great famine of 1866, and it is to be hoped that the progress of irrigation and embankment works, which have since that time been pushed forward with little interruption, and the measures now instituted to improve the communication by sea between False Point (the only port of the Cuttack district which is easy of access) and other places of export, will soon render the recurrence of so fearful a calamity impossible.

Unfortunately the officers who administered the settlement so carefully made were imbued with Bengal prejudices; they wholly objected to the putwaries and to any system of public record and account. Consequently the minute and careful records of the settlement not having been continued and maintained, have been lost to the people; and it has lately been discovered that their rights have been trampled on, and they have been subjected to great tyranny and injustice. The measures which resulted on these disclosures will be described in the report for the present year.

The settlement of Assam is strictly "ryotwar," each cultivator being annually assessed by the officers of Government for the land actually occupied by him. The revenue is collected by officers called "mouzahdars," each of whom resides in his own circle, which is much larger than what is called a mouzah in other parts of India. The mouzahdar receives a commission on his collections, and this is the only expense incurred in realizing the Government demand. Under this system the revenue is most punctually and satisfactorily gathered in. The total revenue of the division, which contains the districts of Durrung, Kamroop, Luckimpore, Nowgong, and Seebsaugor, in addition to the Naga, Khasi, and Jyntea Hills, was in 1870-71 Rs. 20,93,374. Of this demand Rs. 20,82,633, or 99·4 per cent., were collected during the year; and against the arrear demand, which was Rs. 15,254, the collections amounted to Rs. 14,712, or 96·4 per cent. In 1871-72 the demand was Rs. 21,75,799. Of this sum Rs. 21,19,947, or 97·4 per cent., was collected during the year. And of the arrear demand of Rs. 17,066, Rs. 15,677, or 91·8 per cent., was collected. These results are probably not surpassed in any part of India. The assessment is fairly up to the capacities of the province under present conditions, and these facts constitute a strong argument (so far at least as the interests of the public revenue are concerned) in favour of the system of ryotwar settlement, where the assistance of a proper collecting establishment is given.

SYSTEM OF SETTLEMENT.

What has been said hitherto regarding Bengal and Behar has had reference to their general character as permanently-settled provinces. A certain fraction, however, of the whole revenue of these provinces is

Amount of temporarily settled revenue.

derived from lands under temporary settlement. Accurate figures distinguishing between the permanently and temporarily-settled revenue of the past year cannot at present be given, as the standard forms of account supplied by the local officers to the Board do not fully supply the necessary information. From special inquiry, however, it was lately ascertained that in the year 1871-72, the total current demand of which (excluding Orissa and Assam) was Rs. 3,54,82,671, the sum of Rs. 28,22,285, or not quite 8 per cent., represented the demand under temporary settlement.

All classes of Government estates were at first usually, and under present rules are invariably, brought under temporary settlement. A policy was inaugurated fourteen years ago of making permanent settlements of, and selling all Government estates of the resources of which no very rapid development seemed probable, or which there was any other ground for getting rid of, the object being to get rid of a number of widely scattered small properties requiring at the hands of the officers of Government a kind of attention and supervision inconsistent with the system thus prevailing. This view of matters has, however, of late been challenged, and, pending a final decision of the question, temporary settlements only are now permitted of Government estates.

The following are the general rules which have been prescribed by the present Government for the guidance of the revenue officers in making settlements :—

- I.—No estates of any kind (save those described in the next following clause) are to be settled in perpetuity without the express sanction of Government in each case, unless the holders have a statutory right to such settlement.
- II.—Very petty estates, which, though well cultivated, pay less than one rupee land revenue per annum, may be sold revenue-free for ever, being put up at an upset price of ten times the annual jumma, or sold by special bargain to the cultivator in possession at not less than the above rate.
- III.—Alluvial accretions to private estates should be settled separately for a term of years, each accretion with the estate-holder to whom it may belong.
- IV.—No settlement or resettlement should be concluded without first making a survey, or revision of survey, and complete record of rights of the whole estate. In making the record of rights a discretionary power of enlarging or completing the rights of long-settled and deserving ryots should be exercised.
- V.—Ordinarily Government estates should, as existing leases or other arrangements fall in, be settled for a long term of years (a) with the people on the ground, tenure-holders, or village headmen, or ryots, where this can be done; or (b) with a purchaser, where a settlement cannot be made with the people on the land; or (c) in very exceptional cases only with a farmer.

- VI.—The persons with whom the settlement may be made, whether tenure-holders, or ryots, or purchasers, will be proprietors, and will be entitled to have future resettlements made with them. No more farming leases are to be granted, except when there are special reasons for such an arrangement.
- VII.—When the settlement is made with an outsider, or with tenure-holders, or with village headmen, old ryots permanently located on the land are to have pottahs at fixed rates for term of settlement, wherever this may be possible.
- VIII.—Until the survey and record of rights necessary to a resettlement can be completed, existing leases may be extended from year to year.
- IX.—A year should be fixed for each district or division, at which all future long-term settlements or resettlements for estates therein should expire.

An option has also been allowed to the Collector in the case of any estate, to the settlement of which no private individual is entitled

by law, or the settlement of which may have been declined by a person entitled to it, to take the property into direct management when he considers it desirable for the interests of Government or the tenantry.

A system of direct management under village headmen and tehsildars is now in operation in many Government estates and in some of those under the Court of Wards. A selected ryot or headman of the village collects the rents according to the rent-roll furnished to him, and pays the collections to Government. This is the simplest form of settlement. In larger estates tehsildars are appointed who collect the rents through the agency of the village heads. The whole is supervised by the Sub-divisional Officers, and in the management of all Government estates yielding not more than Rs. 1,000 per annum, the newly sanctioned subordinate sub-divisional establishments undertake the duty of collecting from the village heads without any special assistance.

SYSTEM OF SURVEY.

Almost the whole of these provinces have now been surveyed so as to show the boundaries of each village and estate, but there has been no field

measurement except in a few limited tracts. There is a Demarcation Department whose business it is to define the boundaries of villages and estates, and to make a compass and chain survey of them. The ordinary scale of the maps prepared from this survey is 16 inches to the mile. All disputes regarding boundaries are decided by the Demarcation Officers.

Where the whole of a village belongs to one estate, nothing but the outer boundary of the village has to be defined and surveyed; but in a very large proportion of cases there are lands of more than one estate in the village, and the lands of each estate are frequently scattered about the village, and not situated in one compact block. Thus there may be lands of ten estates in a village, but they may be contained in forty, fifty, or even double that number of separate plots. Each of these plots has to be separately defined and surveyed by the Demarcation Surveyor. It

is the extent to which plots of land belonging to different estates are thus intermixed that renders the demarcation of a Bengal district such a lengthy operation. To take Hooghly as an example. There were in round numbers 4,000 village circuits demarcated. In about 1,000 of these the whole of the village belonged to one estate, and no interior measurements were necessary; in the remaining 3,000 no less than 80,000 plots had to be surveyed owing to the intermixture of lands of different estates.

The demarcation is followed by a professional survey, whose business it is to make a scientific survey of village boundaries and also a map showing the geographical and topographical features of the country. The whole of the works, both of the demarcation and the professional survey, has been carried out at the expense of Government, although the Government derives no additional revenue and no direct advantages of any kind from the process. The surveyors, in making the survey of the village boundaries, are guided by the marks put up at time of demarcation at every bend and turn of the boundary. Unfortunately there are no permanent marks round the boundaries of villages or estates in Bengal, and no provision exists for compelling landholders to set them up and keep them on. The consequence is that the marks have been obliterated, and the use of the survey for practical purposes is very much lost.

The subjoined statement shows how far all Bengal has been surveyed up to date; when the survey of each district was commenced and completed; the scale and nature of survey, and the total area as far as it can be ascertained:—

Division or Commissioner-ships.	DISTRICTS.	DATE OF SURVEY.		Area in Sq. Miles.	Scale of Survey.	Character of Survey.
		From	To			
	BENGAL.					
BURDWAN Division.	1. Burdwan ...	1855	1857	3,598	4 inches = 1 mile	Professional village survey.
	2. Bancoorah ...	1854	1856	1,340	Ditto	Ditto.
	3. Beerbhoom ...	1848	1852	1,344	Ditto	Ditto.
	4. Midnapore ...	...	...	5,082	.....	.....
	5. Hooghly with Howrah ...	1869	1872	1,470	Ditto	Ditto.
	WESTERN DISTRICTS.					
PREST. Divn.	6. 24-Pergunnahs ...	1840	1852	2,536	Ditto	Ditto.
	7. Nuddeah ...	1849	1855	3,421	Ditto	Ditto.
	8. Jessore ...	1855	1859	3,713	Ditto	Ditto.
	Soonderbuns ...	Unsurveyed.				
RAJSHAHY Division.	9. Moorshedabad ...	1848	1853	2,705	Ditto	Ditto.
	10. Dinagore ...	1857	1861	4,126	Ditto	Ditto.
	11. Maldah ...	1840-42	1844-45	1,813	Ditto	Ditto.
	12. Rajshahye ...	1847	1849			
	13. Bangpore ...	1848	1853	2,234	Ditto	Ditto.
	14. Bogra ...	1855	1859	3,599	Ditto	Ditto.
	15. Pubna ...	1852	1856	1,501	Ditto	Ditto.
COCH BEHAR Divn.	16. Darjeeling ...	1853	1855	2,009	Ditto	Ditto.
	17. Julpigoreo ...	1851	1852	1,234	2 inches = 1 mile	Ditto and partly
		1862	1867		4 inches = 1 mile	Topographical.
		1858	1859	2,906	Ditto	Professional
	Cooch Behar State	1864	1869			village survey.
		1868	1870	1,292	Ditto	Ditto.

Division or Commissioner-ships.	DISTRICTS.	DATE OF SURVEY.		Area in Sq. Miles.	Scale of Survey.	Character of Survey.
		From	To			
EASTERN DISTRICTS.						
Dacca Division.	18. Dacca	1857	1860	2,897	4 inches = 1 mile	Professional village survey.
	19. Furreedpore ...	1858	1870	1,677	Ditto ...	Ditto.
	20. Backergunge ...	1860	1863	5,264	Ditto ...	Ditto.
	21. Mymensing ...	1850	1857	6,386	Ditto ...	Ditto.
	22. Sylhet, with Jynteah Plains ...	1860	1867	5,415	Ditto ...	Ditto.
CHITTAGONG Division.	23. Cachar (Plains) ...	1857	1839	1,297	Ditto ...	Ditto.
	24. Chittagong ...	1864	1868			
	Chittagong Hills...	1835	1841	2,717	Ditto ...	Ditto.
		1861	1865	6,882	1 inch = 1 mile.	Topographically surveyed by the Revenue Survey.
	25. Noakhally	1863	1865	1,557	4 inches = 1 mile	Professional village survey.
PATNA Division.	26. Tipperah	1861	1864	2,655	Ditto ...	Ditto.
	Hill Tipperah (portion of).	1863	1864	2,879	1 inch = 1 mile.	Topographically surveyed by the Revenue Survey.
	BEHAR.					
	27. Patna	1841	1844	2,101	4 inches = 1 mile	Professional village survey.
	28. Gya	1838	1844	4,718	8 inches = 1 mile	Ditto.
BHAUGULPORE DIVN.	29. Shikhabad	1844	1846	4,385	4 inches = 1 mile	Ditto.
	30. Tirhoot	1842-43	1845-46	6,343	Ditto ...	Ditto.
		1846	1850		8 inches = 1 mile	
	31. Sarun	1843	1847	2,654	Ditto ...	Ditto.
	32. Chumparun	1843	1847	5,531	Ditto ...	Ditto.
ORISSA DIVN.	33. Monghyr	1836	1839	3,013	Ditto ...	Ditto.
		1845	1847			
	34. Bhaugulpore ...	1839	1842	4,327	4 inches = 1 mile	Ditto.
		1846	1850			
	35. Purneah	1844	1848	4,957	Ditto ...	Ditto.
36. Southal Pergunnahs		Surveyed with Bhaugulpore and Beerbhoom.		5,498	4 inches = 1 mile and 2 inches = 1 mile.	Ditto and Topographical.
ORISSA.						
ORISSA DIVN.	37. Cuttack	1838	1842	3,178	4 inches = 1 mile	Professional village survey.
	38. Pooree	1838	1841	2,505	Ditto ...	Ditto.
	39. Balasore	1838	1842	2,006	Ditto ...	Ditto.
Cuttack Tributary Mehals.						
CHOTA NAGPORE.						
SOUTH-WEST FRONTIER AGENCY.						
	40. Hazareebaugh ...	1858	1863	7,021	Ditto ...	Professional village survey and Topographical.
		1868	1872		1 inch = 1 mile	Ditto.
	41. Sub-divn. Palamow & Pergunnah Torree of Lohardugga.	1863	1869	4,923	Ditto ...	
	42. Singhbhoom ...					
	43. Mannbhoom ...	1861	1867	4,921	4 inches = 1 mile	Professional village survey.
Tributary Mehals of Chota Nagpore.						
ASSAM AND ADJACENT HILLS.						
	44. Goalpara	1850	1854	4,433	4 inches = 1 mile	Ditto and Topographical.
		1867	1869		1 inch = 1 mile	Professional village survey.
	45. Kamroop	1865	1869	3,631	4 inches = 1 mile	Ditto.
	46. Durrung	1871 not finished		3,112	Ditto ...	Ditto.
	47. Nowgong	1869	1872	3,421	Ditto ...	Ditto.
	48. Soobsaugor	1863	1872	2,811	Ditto ...	Ditto.
	49. Lakhimpore	1867	...	11,006	Ditto ...	Ditto.
	50. Naga Hills	Surveyed by the Topographical Branch.				
	51. Khasia and Jynteah Hills					
	52. Garo Hills					

From this statement it will be seen that with the exception of the resurvey of Midnapore (which the Survey Department consider must be undertaken), the survey of Bengal Proper is now completed. The bulk of the area still to be dealt with lies in Assam, where an immense tract in district Lakhimpore, estimated roughly at 8,000 square miles, extending beyond the revenue-paying portion already completed, north and east up to the water-shed, is to be surveyed topographically on the scale of 1 inch to 1 mile.

The surveys of Ganges alluvium and diluvium, in accordance with the provisions of Act IX of 1847, were commenced in the Patna division about 1863 and brought to a close in the Rajshahye division last year. The object of the law was to obviate the effects of the changes constantly going on in the banks of rivers and adjacent lands. By these changes large portions of land are often washed away—sometimes suddenly, sometimes by slow degrees—from one side of a river, while an accession of land takes place on the other side. It was thought advisable for the security of the land revenue that some provision should be made for allowing a proprietor whose estate had suffered diluvion an abatement of revenue corresponding to the extent of his loss, and on the other hand for assessing the proprietor whose estate had gained land with an additional revenue proportionate to the amount of his gain. The law accordingly enacts that in districts of which a revenue survey has already been made, Government may, whenever ten years may have elapsed from the date of approval of such survey, have a new survey made of lands on the banks of river with a view to ascertain the extent of the changes since the last survey. Having ascertained by inspection of the new survey map which estates have lost, and which gained land, a corresponding abatement from, and addition to the revenue assessed on the estates respectively losing and gaining is to be made.

The settlements made were formerly made permanent, except when the proprietors of some of them refused to take the engagement, in which case the lands were let in farms for periods of from three to ten years; but latterly orders have been issued by Government prohibiting further permanent settlements, and temporary settlements are made.

CIVIL DIVISIONS OF BRITISH TERRITORY.

THE territory subject to the Lieutenant-Governor of Bengal is
 Commissionerships. portioned off into eleven large tracts,
 officially called divisions, each of which
 is superintended by a Commissioner. Five districts of Bengal Proper
 west of the Bhagiruttee or Hooghly constitute the Burdwan division,
 and are known as Western Bengal. The Presidency, Rajshahye, and a
 part of the Cooch Behar divisions, are comprised in Central Bengal;
 Eastern Bengal comprises the Dacca and Chittagong divisions. The
 province of Behar contains the Patna and Bhaugulpore divisions.
 Each of the provinces of Orissa, Chota Nagpore, and Assam, constitutes
 a separate division.

These divisions are divided into 36 Regulation and 18 Non-
 regulation districts. The Regulation
 Districts and sub-divisions. districts comprise 78 sub-divisions,
 besides the head-quarters division of each district. When the sub-
 divisional system is fully carried out, the number of sub-divisions in
 these districts will be increased by about 30, so that each of the present
 districts may then comprise about four sub-divisions, including the head-
 quarters division. The Rajshahye, Dinagpore, and Rungpore districts
 of the Rajshahye division, Sylhet of

Regulation districts. Dacca, and Chittagong and Tipperah
 of the Chittagong division, and a few other districts, are not yet fully
 sub-divided, and there are some smaller districts regarding which it is
 doubtful whether they will be maintained or reduced into sub-divisions.
 The annexed table shows the divisions, districts, and out-lying sub-
 divisions of the Regulation districts as they stood on the 31st March
 1873.

DIVISION.	District.	Sub-division.	DIVISION.	District.	Sub-division.
BURDWAN ...	Burdwan ...	{ Cutwa. Culina. Bood-Bood. Raneegunge. Jehanabad.	DACCA (Con- cluded) ...	Mymensingh	{ Jamalpore. Attia. Netrokonah.* Kishoregunge.
	Bancoorah.			Sylhet ...	{ Sonamgunge.* Hubbeegunge.* Kurrenigunge.* or Latoo.
	Beerbhoom.		CHITTAGONG	Chittagong...	Cox's Bazar.
	Midnapore ...	{ Tumlook. Gurbetta. Contai.		Noakhally.	
	Hooghly ...	Serampore.		Tipperah ...	Brahmanbariah
PRESIDENCY DIVISION ..	Howrah.		PATNA ...	Patna ...	{ Behar. Barh. Dinapore.
	24-Pergun- nahs. ...	{ Busscherhaut. Brasot. Diamond Har- bour. Barripore. Satkhoerah. Barrackpore. Dum-Dum.		Gya ...	{ Aurungabad. Jehanabad. Nowadah.
	Nudda ...	{ Bongong. Meherpore. Choodalangah. Kooelitenh. Ranaghat.		Shahabad ...	{ Sasceoram. Buxar. Bluhbooh.
	Jessore ...	{ Nurrail. Khoolnah. Jenidah. Bagirbaut. Magoorah.		Tirhoot ...	{ Durbhungah. Hajepore. Mudhoobanee. Soetamarree. Tujpore.
	Moorshed- abad ...	{ Rampore Haut. City Moorshed- abad. Jungypore.		Sarun ...	Sewan
RAJSHAHYE	Dinagepore.		BHAUGUL- PORE ...	Chumparun	Bettiah.
	Maldah.			Monghyr ...	{ Begon Sorai. Jannooie.
	Rajshahye ...	Nattore.		Bhaugulpore	{ Soopool. Mudheypoorah. Bauka.
	Rungpore ...	Bhowanigunge.		Purneah ...	{ Kudba.* Kismungunge. Arrareah.
	Bograh.			Cuttack ...	{ Jajipore. Kendraparah. Juguteingpore.
DACCA ..	Pubna ...	Serejgunge.	ORISSA ...	Pooree ...	Khoordah.
	Dacca ...	{ Moonshegunge. Manickgunge.		Balasore ...	Bhuddruck.
	Furreedpore	{ Goalundo. Bhanga or Kas- simore.*			
	Backergunge	{ Perozapore. Madaripore. Bowful or Pa- tookhally. Dukhin Shah- bazpore.			

Note.—Sub-divisions marked with an asterisk (*) have been sanctioned, but not yet opened.

The Non-Regulation districts, as shown below, form three entire Commissionerships, and portions, consisting of the Sonthal Pergunnahs, Chittagong Hill Tracts, and Cachar, belong respectively to the Bhaugulpore, Chittagong, and Dacca divisions. They contain 22 sub-divisions.

DIVISION.	District.	Sub-division.	DIVISION.	District.	Sub-division.
COOCH NAH	BR-	Darjeeling ...	CHOTA NAG- PORE	...	Hazaree- baugh ... } Puchumba.
		Julpigoree ...			Loharduggah } Palamow.
		Gowalpara			Singbhoom } Gobindpore.
		Garo Hills.			Mounbhoom } Burpettah.
		Cooch Behar.			Kamroop ... } Nulbarie.*
DACCA	...	Cachar			Durrung ... } Mungledye.
					Nowgong. } Sooteah.
CHITTAGONG	{	Hill Tracts	ASSAM	...	Seesaugor ... } Golaghat.
		of Chitta- gong ...			Jorhaut. }
		Hill Tipperah.			Luckimpore } Joypore.
					North Luckim- pure. }
					Suddya.* }
BHAUGUL- PORE	...	Sonthal Per- gunnahs ...			Naga Hills.
					Khasi and Jynteah Hills. Jowyr.
		Rajmchal.			
		Deoghur.			
		Doomka.			
		Godda.			

Note.—Sub-divisions marked with an asterisk (*) have been sanctioned, but not yet opened.

The area and population of these tracts is given in detail in the chapter on the census. One division, that of Patna, contains more inhabitants than the Bombay Presidency; another division, Chittagong, has only a fourth the number of inhabitants and one half the area of Patna. The districts vary in size from about 1,500 to between 11,000 and 12,000 square miles, while their population varies from a quarter of a million to four millions and a quarter. The population of sub-divisions varies from 15,000 to 900,000.

The boundaries of districts and sub-divisions have undergone frequent changes with improvements in the administration. These changes unfortunately were not in the past carried out on any fixed principles, and there was till lately much confusion of jurisdiction. Thus although the offices of Collector and Magistrate are vested in the same individual, it by no means followed that the jurisdiction of the Collector was continuous with that of the Magistrate. The civil courts again have sometimes a local jurisdiction of their own, so that the same district was not unfrequently found to have different boundaries, according as it is regarded as the district of the Collector, of the Magistrate, or of the Judge. Recently much has been done, and is still being done, to assimilate the jurisdictions.

For the purposes of revenue administration the country was divided by the Mogul Government into *pergunnahs*, each *pergunnah* comprising a certain number of villages with their lands. This arrangement still forms the basis of our own revenue system; but from its want of compactness, as well as for other reasons, it has been found extremely

inconvenient, and in Bengal it has fallen into such decay, that in some districts the pergunnah boundaries can hardly be ascertained. Detached villages belonging to the same pergunnah may now be found all over the district and in two or more districts. Practically the pergunnah divisions of districts have died out, except for purposes of land revenue payments, in favour of the simpler and more compact arrangements adopted for purposes of police. This arrangement had its origin in Regulation XXII of 1813, by which the Magistrates were directed to divide their districts into police jurisdictions to be named after the places at which the chief police officers were stationed. And

Thannahs.

in this way the term *thannah*, which originally meant only the police station, came to be applied to the jurisdiction subordinate to that station. The thannah divisions have been for years growing into greater importance, and are now utilized to a large extent for other than police purposes. The thannah is now the unit of which a sub-division is composed, as the sub-division is of the district. The total number of thannahs in Bengal is 610; the average area of each is 280 square miles. The population of thannahs varies from 15,000 to 349,000: some of the large thannahs are divided again for police purposes into outposts or *pharrees*.

Outposts.

Tehsildar divisions lately established.

The tehsildari system, which obtains in other parts of India for the collection of revenue and the tehsil division of territory, is not generally known in these provinces. A system of direct revenue collection and Government management has, however, lately been introduced into several tracts not permanently settled and hitherto let out to farmers or subjected to some such management. The principal tracts affected are the Damin-i-koh of the Sonthal Pergunnahs, Jynteah, the Bhootan Dooars, and Palamow. In Khoordah there is already a tehsildari division. In the province of Assam the land is divided for revenue purposes into mouzahs, or circles of villages, the revenue of which is collected by

Mouzahs in Assam.

an officer called "mouzahdar," who resides within the circle. There are no limits of villages as distinguished from mouzahs recognized for fiscal purposes. Each mouzah is compact in itself, and there are no revenue divisions intermediate between the mouzah and the individual ryot's holding. A somewhat similar arrangement exists in Chittagong,

Canoongoe's divisions in Orissa.

where estates are very many and very small. In Orissa also the jurisdiction of canoongoships constitute a civil division for fiscal and executive purposes. The districts are so mapped out that at every twelve or fifteen miles there is a canoongoe's head-quarters. The canoongoes are officials available for every sort of duty between the sub-divisional officers and the people.

The municipal system has been of recent years introduced into these provinces. Calcutta is administered under a separate Municipality

Municipalities.

and special laws for the city. There are several Acts for the interior. Twenty-four larger towns are regulated by Act III (B.C.) of 1864; 95 smaller

Townships.

townships by Act VI (B.C.) of 1868. Act XX of 1856 enables the 48 villages and small unions in which it exists to pay for their watch and

Unions.

ward and to meet more urgent demands of ordinary conservancy. Act XXVI of 1850 is still in force in one place in Bengal—Jumalpoore, in the Monghyr district. The Presidency, Burdwan, and Patna divisions, are those in which the municipal system has most developed itself. There are, however, very few places in Bengal with any pretensions to be called towns, and almost the whole of the vast population of this

Villages.

province consists of persons connected with agriculture, who live in little rural villages. These villages in Bengal are isolated, detached places, with a number of residents, varying from 200 or 300 to 3,000, living very much among themselves, and clinging tenaciously to their homes. These units are not apt to coalesce into clumps or associations, except in the immediate neighbourhood of the presidency or other such large cities, but each remains with its own houses, and adheres to its own communal servants. Sometimes the Mahomedans live a good deal by themselves or have their own villages apart, and the different castes of Hindoos congregate together in their own quarters. Sometimes the different religions and castes are very much mixed together. This is all a trace of the past, but the old communal institutions by which the village was governed have faded away under the influence of our rule and the zemindary system. The ancient indigenous village system of India still exists in the hilly countries attached to Bengal, but in the plains they have almost disappeared. The chowkidar or watchman now lingers as almost the only vestige of the old municipal commune. The other traces that remain are scanty; some things are in some places regulated by village *punchayets* or headmen of some sort, but more and more the zemindary agent has supplanted the village *mondul*, and the landlord takes the place of the indigenous self-rule. It has been the Lieutenant-Governor's especial object to retrace this order and give the people that measure of self-government and local freedom to which both their old traditions and their modern education alike point, by giving to towns and restoring to villages some sort of municipal or communal form of government. Late inquiries have shown that the materials of old institutions still exist in a greater degree than had been suspected.

DETAILS OF THE LAST CENSUS—TRIBES AND LANGUAGE.

THE census of Bengal, which was effected during the cold weather of 1871-72, was the first census of the country that had ever been attempted.

THE CENSUS OF 1871-72.

Only partial enumerations of particular areas had from time to time been previously made, and they were either estimates based upon the number of houses in the district incorrectly computed, or they were conclusions drawn from experience and general observation, and entitled to little or no reliance.

The present census computations show the total number of persons counted in the provinces under the Government of Bengal to be 66,856,859.

This aggregate total of population far exceeds that of any previous estimate. With few exceptions every district in the province is more thickly populated than even the most liberal official calculation had allowed for.

The old British territories in Northern India consisted in the last century of the provinces of Bengal and Behar. The area of those territories included the present regulation districts of these provinces and the greater part of the division of Chota Nagpore, but it did not include Assam and Cachar nor Darjeeling, and the Bhutan Dwar, nor until later were Orissa and the adjacent hill tracts annexed by the British Government. The original area was approximately estimated by Mr. James Grant in 1786 in his *Analysis of the Finances of Bengal* at 97,200 square miles.

The first opinion promulgated concerning the population of Bengal, Behar, and Orissa (including only under the term Orissa what is now comprised in the Midnapore district and part of Hooghly), was that it amounted to ten millions. This was put forth soon after the Company's acquisition to the Dewany, and is the "entire assumed population" throughout Mr. Grant's *Analysis of the Finances and View of the revenues of Bengal*. In the meantime, however, it was found out that this estimate was too low. Sir William Jones, in 1787, forming his judgment from materials to which we have now no access, thought that the population of Bengal, Behar, Orissa, and Benares, amounted to twenty-four millions. In the first year of this century the Bengal Government called for information from the Collectors and

Judges stationed in the districts in the four provinces ; but the returns were so imperfect, and, where they were made by these two descriptions of officers, so contradictory, that no general conclusion could be drawn from them. Mr. Colebrooke, in 1802, computed the population to be thirty millions. The Fifth Report of the Select Committee on the Affairs of the East India Company, after consideration of these data, records in 1812 that "if any opinion were now to be offered on a point which has not been subjected to strict investigation, perhaps there would be no danger of exceeding the truth in adopting a medium between the calculations of Sir W. Jones and Mr. Colebrooke, and supposing the population of the four provinces to be not less than twenty-seven millions." Dr. Buchanan had, however, about this period made an estimate of the population of several districts, which he puts very much higher than other authorities.

The semi-official estimate of Mr. Adams in 1835 assumes the population to be thirty-six millions. In 1844, when the territories under the Bengal Government were nearly the same as those now under the Lieutenant-Governor, their population was estimated by Mr. Dampier, the Superintendent of Police in Bengal, at 31,200,000.

Of late years, however, the population of Bengal has been generally accepted at about forty or forty-one millions, and that total has been the recognized basis for legislation and finance. This has always been the accepted estimate since the publication of the Parliamentary Blue Book "on the area and population of India" on the 27th July 1857. The total population of all India is there recorded at 180,884,297 ; the total population under the administration of the Government of Bengal at 40,852,397. In the administration report of this Government for the year 1870-71, the population is put down after revision at something over 42 millions.

After much discussion instructions were issued by the Government of India that arrangements should be made for a general census of the population in the year 1871, and preparations having been duly made, the work was undertaken in that year.

At an early period it was found expedient to abandon the idea of taking the census of the whole of the vast provinces within the jurisdiction of the Lieutenant-Governor on one and on the same day. In many cases indeed an entire subdivision, and even a whole district, was in fact eventually enumerated simultaneously, but it was not found possible or desirable to lay down any precise scheme of operation to be adopted everywhere alike. The time within which, and the agency by which, the enumeration was made, was to a considerable extent entrusted to the experience and discretion of the local authorities. It was directed that each district and division was to be taken as nearly simultaneously as possible with reference to the circumstances of each, provided that the whole must be completed between December 1871 and March 1872. The Bengal census, moreover, did not pretend to deal with the precise status of every individual in the country, man, woman, and child, with rigorous accuracy. That would have been impossible in these provinces. On no previous occasion had so gigantic an enterprise

The manner of taking the census, and the agency employed.

been undertaken, and the machinery which is available elsewhere, though not wanting in Bengal, had on all sides been suffered to fall into desuetude, and could only be utilized on this occasion to a very partial extent.

All the information, however, attainable and really necessary for practical purposes was shown in the returns. The names, castes, and professions of all heads of houses and adult males, were recorded; while the women and children in each house were numbered—not named, the caste and profession of the head of the family being sufficient to distinguish the family. Religion also was stated, and adults or grown persons were distinguished from children under twelve. These were the main points shown, while it was also endeavoured to elicit the numbers of schools, of boys and girls who attended schools, of blind persons, deaf persons, insane persons, idiots, lepers, and the like.

Mr. Beverley, the Inspector-General of Assurances, was selected as the most proper officer to supervise the census arrangements from their commencement to their close. To his unwearying devotion to his duties, and the excellence and completeness of his work, the Lieutenant-Governor has borne willing testimony.

To facilitate operations, and to prevent any complications which might possibly attend the employment of an unpaid agency, a brief Act (XI of 1871) was passed by the Bengal Legislative Council, authorizing the local officers to appoint enumerators, and providing certain penalties for their misconduct or neglect. The Act invested the enumerator so selected with the power to collect the required information, making refusal to answer their questions on such points a penal offence. It also empowered Magistrates, under certain restrictions, to call for assistance in the matter from landholders or their agents.

The agency employed in the enumeration of the people was chosen as far as possible from among the people. The census was thus virtually effected by the people. In Assam and Behar indeed the enumeration was carried out through the indigenous fiscal establishments of the country; but in Bengal the census was for the most part taken by indigenous agencies or private individuals owning no official allegiance to Government.

Very much was elicited by the census and has been confirmed by recent inquiries regarding the various indigenous agencies still found existing in the country. These agencies were made use of as far as possible. Old institutions, officially supposed to be long ago dead and gone, were still found to survive in many places, and rural agencies, condemned long since, were proved to exist in several parts of the country and afforded much assistance. The reports on the indigenous agencies of the country from the divisional Commissioners, many of which are very full and interesting, have recently been published as a volume of Selections by the Bengal Government.

Many private individuals also accepted office as unpaid enumerators and rendered very useful service. The Government servants of the police and registration departments, schoolmasters and the like, largely contributed to the result as a supervising agency.

It was hardly to be expected that the first attempt to carry out a census in Bengal would be accomplished without exciting alarm in the minds of the people. The most absurd rumours got abroad. But as the people were brought into contact with the census officials, they gathered more and more of the true object in view, and many of them finally learned to laugh at their own fears. As a rule, there was no real opposition whatever: in one place only was there any serious outbreak. The most prevalent ideas, and those which took deepest root in the minds of the people, were the anticipation of increased taxation and compulsory emigration. No general dissatisfaction, however, existed, and any passive resistance that may have been made was purely local and easily overcome.

The census was successful beyond all expectation. If we had expected to get absolute accuracy, the plan of taking the census on various

General accuracy of the census. dates within a moderate period would no doubt have been inconsistent with such an expectation. But no census in India can possibly be without a considerable margin of inaccuracy, and within that margin the small inaccuracies resulting from the taking different tracts on different days are as nothing. The details are, the Lieutenant-Governor considers, sufficiently ample and sufficiently accurate. The Lieutenant-Governor's own feelings were, he confesses, very much those expressed by more than one district officer and entertained, he believes, by many more, viz. that they began by doubting whether the returns would be worth the paper on which they were written, and ended by thinking them wonderfully good and trustworthy. This last opinion appears everywhere in the reports. All that has been learned of tests applied by superior officers and others, and by some independent observers, goes to confirm the belief. Some mistakes and inaccuracies on a small scale there must no doubt be, but the general result is, the Lieutenant-Governor believes, surprisingly accurate.

The former estimates of population are so little trustworthy, that it is unfortunately hopeless to attempt to found on the present census any estimate whatever of the progress of the population as a whole, or of the rate of increase or decrease in any part of the country. To get any such estimate at a future day, we must depend on the life statistics of which we are just making a commencement, and on the comparative results which a future census may show. We can only try, in the course of certain inquiries of a statistical character which are now set on foot, to ascertain whether there is good evidence that certain districts have much increased in population and cultivation, and that such increase has been general.

It will also be necessary to inquire whether certain districts have decreased. The estimates of population made by Dr. Buchanan between 1807 and 1814 of the districts he surveyed with the authority of Government, differ entirely from the official estimates accepted in those days, and in some cases show a curious approximation to the figures of the recent census. It is impossible now to attach the exact

value which should be accorded to Buchanan's figures; but the districts which from a comparison with his conclusions would seem to have largely decreased in population, viz. the conterminous districts of Dinagepore, Maldah, and Purneah, are precisely those which we know to be among all the districts of the Gangetic plain abnormally low in population. So far as we have information regarding the condition and regarding the rates of land revenue and rent of these districts at the present time and at the time of the permanent settlement, it would seem that they have prospered less than any other districts of Bengal, and are now altogether *relatively* in a much lower position than they were at the end of the last century. Within these districts the ruins of the city of Gour testify that in some places at any rate disease has worked a great depopulation. The census report but too clearly points to the evidences of a serious effect on the population of the Burdwan district, caused by the disease which we are now endeavouring to combat. If the population there has not yet actually diminished, as compared to previous periods, it seems but too clear that the number of persons in each household is now abnormally low in the fever tracts.

On the other hand there are apparently general reasons for believing the growth of population in Bengal to be very rapid. We will know this when our inquiries are more complete after another census, but Mr. Beverley's disquisition on the large proportion of children in these provinces seems to show that births are more numerous than they are in England and in other western countries. "Everybody," it has been said, "marries; an unmarried man of twenty-five, or an unmarried girl of fifteen, are hardly to be found. As soon as girls become marriageable, generally before, husbands are without difficulty found for them. Marriage is a thing which happens of course—a necessary part of life. The people live a regular, sober, domestic life, and seldom leave their homes, not being called upon for the performance of military service or public labour, or servitude, so common in most countries. Very few marriages are unproductive. Among the causes of increase is to be reckoned the extreme facility of rearing children. Here no infants perish of cold. As soon as a child is weaned, it lives on rice, goes naked for two or three years, and requires no care whatever. Poverty scarcely ever prevents a man from rearing a family of children."

The question whether an excessive birth-rate is counterbalanced by a higher rate of mortality than in Europe, is one of the most important and interesting statistical problems which we may now hope soon to solve. The fact can only be conclusively demonstrated when a system of mortuary returns shall have been established upon a satisfactory basis. It is, however, believed, by those who have most carefully studied the question, that the rate of mortality is higher; and it is evident that *prima facie* causes are not wanting to produce such a result.

The five provinces under the Bengal Government have already been described in a former chapter of this report; their total area, including tributary estates, is 248,231 square miles*, with an aggregate population, as we have seen, of 66,856,859 souls.

TOTAL AREA AND POPULATION.

* See Note on page 118.

In all the Central and Western districts of these provinces, including the tributary estates of Orissa and Chota Nagpore, the census was fully carried out; but it was not completely effected in some of the Eastern border districts, where there were political difficulties, increased by the circumstances that a house or poll-tax is the ordinary form of taxation in the unsettled Indo-Burmese districts. The Chittagong Hill Tracts and Garo Hills (so far as they own British allegiance) being the scene of war or uneasiness, it was avowed that a full census could not be taken. Some of the Assam tribes beyond the ordinary land revenue settlement were not counted; and especially in the farthest district of Upper Assam (Lukhimpore) considerable tracts of country marked as British territory and inhabited by tribes who owe us a theoretical allegiance, but who in practice are not very directly ruled, were omitted. Owing to administrative accidents the Terai under the Darjeeling Hills and the adjoining Bhutan Dooars (ceded by Bhutan after the late war) were not properly counted. Sikkim, Hill Tipperah, and the Nagas and *quasi*-independent tribes of Assam, were neither counted nor estimated, because though within our political system, they are not administered by us, and for the most part have not been explored. Bhutan and the Himalayan tribes to the east are wholly and entirely independent. Munipore is not under this Government.

Altogether under direct and indirect British administration the population of Bengal may be said to amount in round numbers to 67 millions; of this total 2 millions may be taken as the population of the tributary estates, in which the Rajahs and Chiefs exercise a prescribed jurisdiction, subject in greater matters to British courts and officers. Nearly 1,300,000 are in the Orissa tributary mehals, 400,000 in those of Chota Nagpore, and the remaining 300,000 may be taken to represent the tribes in the Eastern frontier imperfectly counted.

This leaves 65 millions under direct British administration; of these nearly 37 millions are in the great central province of Bengal proper. The Hindoostanee-speaking provinces are just about half the area and population of Bengal; the population being $18\frac{1}{2}$ millions, or, including the Southal Pergunnahs now attached to Bhaugulpore, upwards of $19\frac{1}{2}$ millions. Orissa, excluding the tributary estates, is just over 3 millions; Chota Nagpore, similarly excluding such estates, has about $3\frac{1}{2}$ millions, mostly aboriginal in blood; and 2 millions are in Assam, including the Gowalpara district now attached to Cooch Behar, but geographically connected with Assam.

The density of the population is thus, as we should have expected, subject to the widest variation.

DENSITY OF THE POPULATION.

Bengal proper, which occupies not much more than a third of the whole area, contributes more than half the population; Behar proper, with one-sixth of the total area, supplies three-tenths of the population; the provinces of Assam and Chota Nagpore are as large as Behar, yet they have only a ninth and a fifth part of its population respectively. The average number of persons to the square mile is 465 in Behar, 389 in Bengal, 181 in Orissa, 87 in Chota Nagpore, and 51 in Assam. The average density of population over the whole

area of these provinces is 269 to the square mile. In the United Kingdom it is 262; in Germany it is 189; in France it is 180.

Putting aside the hilly districts on the frontiers, the plains of Bengal and Behar may be said to comprise in round numbers about 100,000 square miles with a population of 53 millions, giving throughout this great tract an average of 530 souls per square mile.

The district of Hooghly is the most populous in Bengal. The average density of its population is 1,045 to the square mile. Its thinnest thannahs, the most northern and most southern respectively, have a density of nearly 700 souls to the square mile. There is a concentrated population in the towns and great villages, containing a mercantile and fishing community which fringe the river Hooghly in the Hooghly district. But apart from this we find in the back-lying thannahs an immense population. In Doomjoor, next to Howrah, the population rate is 1,417 per mile. The agricultural thannahs of Juggutbullubpore, Amtah, Khanakool, and Chandceopore of Hooghly, and the adjacent thannahs of Dasporc, Pauchkoorah, and Debra of Midnapore, are a low-lying water tract stretching from behind Howrah to near Midnapore, without a single town, and yet they have a population fully equal to or exceeding 1,000 per square mile of gross area. In the district of Sarun in the Patna division, where the density of the population is second only to Hooghly, there are several rural thannahs, where the population averages above 900 to the square mile. In the small and entirely rural sub-division of Mooushigunge in the Dacca district, the population is 459,874, with a density of 1,031 souls to the square mile.

Speaking less specially, the most populous parts of the country are:—

(1) The metropolitan districts of 24-Pergunnahs and Hooghly, with Howrah, comprising	Sq. miles. 4,220
(2) The districts of Dacca, Furreedpore, and Pubna	6,359
(3) The district of Rungpore	3,476
(4) Patna, Tirhoot, and Sarun in Behar	11,098

These nine districts, with an aggregate area of 25,153 square miles, have all an average population of over 600 persons to the square mile.

Next to the above, as regards the density of their population, come the seven districts of Burdwan, Beerbhoom, Nuddea, Jessore, Moorshedabad, Rajshahye, and Tipperah, all in Bengal proper, with an area aggregating 19,413 square miles and a population of between 500 and 600 persons to the square mile.

In eleven districts the population is from 400 to 500 in the square mile, viz. in Midnapore, Bogra, Cooch Behar, Backergunge, Chittagong, Noakhally, Gya, Chumparun, Monghyr, Bhaugulpore, and Cuttack; their total area aggregates 36,547 square miles.

But though Behar and the Gangetic delta are thus densely populated, there remain large tracts of territory in these provinces with a population of less than 200 souls to the square mile. Maunbhoom is the only district in Chota Nagpore which has more than this average population. In Assam there is no district with a population anything

like it. Of the total area of Bengal, including tributary estates, only one-half exceeds this proportion; yet in Europe an average density of even 200 souls to the square mile would be considered a tolerably abundant population. It is a density which not even Germany as yet possesses.

The Bengal provinces * comprise 200,938 villages, townships or communes. The people reside in 11,383,498 houses. The average area of the lands of each commune is 1.00 square miles, and the average number of souls to each commune is 325.55. The average number of souls to each house is 5.74, or rather more than 5½.

The populations under the administration of the Lieutenant-

THE VARIOUS RACES AND LANGUAGES.

Governor comprise several distinct nationalities. These nationalities are mainly resident in their several provinces; but as the national boundary does not in all cases precisely correspond with the provincial boundary, it may be mentioned that Bengal is inhabited throughout by Bengalis of Bengali language and manners, and that they slightly overpass the Bengal boundaries. A small part of the Purneah district

Bengalis.

may be said to be Bengali. Bengalis are also resident in some number in parts of the Sonthal Pergunnahs, and people speaking that language are numerous in the Maunbhoom district of Chota Nagpore. Altogether the Bengali-speaking people may be taken to be about 38 millions.

The people of Behar are Hindoostances, speaking the same language, and in their manners, &c., identical with the forty or fifty millions of Hindoostances who inhabit the North-Western Provinces, Oudh, and parts of the Central Provinces, Rajpootana, &c. Besides Behar proper a good many are resident in the Sonthal Pergunnahs. Throughout the largest districts of Chota Nagpore they are numerous, and their language, manners, and civilization, are those that prevail there, as the aborigines succumb to external influences. Altogether the Hindi-speaking people of these provinces number about twenty millions.

The Ooriya speakers of Orissa, plain and hill country, together, are about four millions. This is not, however, the whole Ooriya race, as

Ooriya.

they form also the population of a great part of the Ganjam district in Madras, of Sumbulpore, &c., in the Central Provinces, and come somewhat over the border on the side of Bengal and Chota Nagpore.

Assamese.

In Assam the semi-Bengali of Gowalpara and Assamese of the upper districts scarcely make up two millions.

The large number of Mahomedans found in Lower Bengal is in many respects the most interesting of the facts brought out by the census.

Number of Mahomedans.

* Exclusive of the districts of Darjeeling, Julpigoree, Cooch Behar, Hill Tipperah, Chittagong Hill Tracts, Naga Hills, Khasi and Jyntea Hills and Garo Hills, for which the number of villages is not available.

The total number of Mahomedans in these provinces exceeds twenty and a half millions (20,664,775). The vast majority of them, namely, seventeen and a half millions, are to be found in Lower Bengal. In Behar they hardly number more than two and a half out of a total population of nearly twenty millions. In Assam, Chota Nagpore, and particularly in Orissa, they are very sparse.

The district in which Mussulmans are most numerous, as compared with other classes of the community, is Bogra, where they compose upwards of 80 per cent. of the population. In Rajshahye they are over 77 per cent., and in Pubna 69 per cent. In the districts of Chittagong and Noakhally the Mussulmans constitute three-fourths of the population.

Curious as it may appear, it is not in the great Mogul capitals that we find the Mahomedans most numerous. In Dacca, which for a long time contained the seat of Government, Mahomedans are very slightly in excess of Hindoos; in the Maldah district, which contained the city of Gour, the Mahomedans form 46 per cent. of the population; in Moorshedabad they are scarcely 45 per cent.; in Patna they only form 12 per cent. of the inhabitants of the district; even in the city of Patna they are only 24 per cent. On the other hand, not to refer to the districts already mentioned, in Backergunge, Tipperah, Rungpore, and Mymensingh, they constitute two-thirds of the population; and in Dinagepore, Nuddea, Jessore, and Furreedpore, more than half.

Wherever the Mahomedans form the bulk of the population, it will be found, as a rule, that they are the cultivating classes of the people, while the upper and mercantile classes are Hindoo, and some very low classes are semi-Hindoos, probably for the most part aboriginal in blood. All the sailors of the Eastern districts are Mahomedans.

The number of Mahomedans in Behar is comparatively small, and they mostly belong to the upper orders, living in towns such as Patna, Barh, and Behar. The great mass of the people and cultivating classes in that province are still Hindoo. The fabric of Hindooism was probably too firm to be shaken by the Mussulman invasion, and conversion had comparatively little success. Though the aboriginal tribes are still to be found in Behar, they probably did not at that time form so large a percentage of the population as in the lower delta of Bengal. Swept on by the Aryan tide of immigration, large numbers of them had probably been exterminated, or were driven down the Gangetic valley, or into the wilds of Chota Nagpore. The Aryan element was thus left more to itself, and seems to have consolidated its position sufficiently to be able to resist the shock of a proselytising faith.

But in Bengal it was not so: there the Mussulman invasion probably found Hindooism resting on weak and uncertain foundations, with but feeble hold over the minds and affections of the great bulk of the inhabitants. The Aryan element, so far from displacing the indigenous children of the soil, was only able to hold its own by frequent importations of fresh blood from Upper India; and so it happened that when the Mussulman conquerors of Hindoostan invaded the lower delta with the sword and the Koran, they were not altogether unwelcome. They

proclaimed equality and broke down the trammels of caste. In Bengal Hindooism succumbed, and the mass of the people embraced the faith of Mahomed.

The Mussulmans of the Delta little differ in language, customs, or occupation from the other inhabitants of the country. The Mahomedan has the same language and uses precisely the same nomenclature and expressions of thought as his Hindoo neighbour.

The great bulk of Mahomedans in Bengal, as elsewhere in India, are Soonies, very few Shias being found in this country. The eastern districts, it is well known, abound in Ferazees.

There are altogether in Bengal 19,857 Europeans of all nations,

Europeans and non-Asiatics.

of whom 11,324 are English, 3,631 Irish, and 2,356 Scotch. There are 360 Frenchmen, and 354 Germans. The American population is 2,649, the African 83, and the Australasian, 19. Altogether the non-Asiatics in Bengal number 22,608; of this total 17,135 belong to Bengal proper, 13,757 are comprised in the 24-Pergunnahs, including in this district the city of Calcutta. In Hooghly with Howrah there are 813, in Darjeeling 420, in Burdwan 333, and scarcely more than 200 in any other district. In the province of Behar the number of Europeans is 3,287; 1,620 are in the Patna district, and 510 in Monghyr. The remaining districts average from 85 in Chumparun to 257 in Shahabad; but the proportion of the European community is (if we exclude Calcutta) much more considerable in the Behar and Bhaugulpore divisions than it is elsewhere in Bengal. This is due to the greater development of European industry as well as to the military element, and partly to the more salubrious climate of the upper provinces. In Orissa there are 232 Europeans. In Chota Nagpore there are 1,501, the great bulk of whom are in Hazareebaugh, which besides containing the European penitentiary is a military station. The Europeans of Assam are the tea-planters and officials of the province. If they are fewer (394) than might have been expected, it must be remembered that a large number frequently leave Assam to visit Calcutta during the cold weather; 137 are residents of Lukhimpore.

The Eurasian population is 20,279, of whom 18,419 belong to

Eurasians.

Bengal proper: 10,362 are in Calcutta and the 24-Pergunnahs, and 5,638 in Dacca; there are 896 in Chittagong, and 557 in Hooghly. In Dacca and Chittagong there are colonies of Feringhees, descendants of Portuguese, who made these places their head-quarters in Eastern Bengal.

The population of Asiatics other than natives of India and British

Asiatics other than natives of India.

Burmah is 47,030. The majority of these are composed of the Nepaulese in Darjeeling, and the Munipoorees in Sylhet and Cachar; 2,277 Nepaulese were enumerated along the frontier of our Behar territory. The Armenian community comprises nearly 800 souls, chiefly in Calcutta and Dacca. The Chinese number 582, nearly all shoe-makers and carpenters in Calcutta. The Jews, 574, mainly in the metropolis; Parsees 1,223, and Persians 277.

Christians, Native and European together, number no more than 93,003 souls. At least one-half of these are Europeans or East Indians.

Christians.

The native converts are chiefly found in the Presidency, Dacca, and Chota Nagpore divisions. There are several missions in the neighbourhood of Calcutta, though apparently not more than 3,000 native converts in Calcutta itself. In Nuddea and Backergunge there are several Christian villages. A few scattered mission stations are found in the Sonthal Pergunnahs and Orissa. It is, however, in Chota Nagpore that Christianity has made most progress. The census returns show 16,000 Christians in that province, nearly all of whom are native converts. They belong mainly to the aboriginal tribes, and the great majority are located in Lohardugga. Ranchee is a large mission station, and there are missions also at Purulia and Chyebassa.

The Boodhists are mostly found in Chittagong, where they consist of the Mughls in the south of the district and in the Hill Tracts. There

Boodhists.

is also a small colony of Mughls in Backergunge. In Darjeeling the Lepchas and Serpa Bhootias profess a form of Boodhism. In Assam we also find the Khamtis and some other Boodhist tribes. According to the returns, which do not claim to be wholly accurate, the Boodhists number 86,496.

The tables show a total of 2,351,904 souls, belonging to aboriginal tribes, who have not adopted any form of Hindooism. This total would

Aborigines.

probably not fall far short of two millions and three-quarters if we include the aboriginal tribes found in Hill Tipperah and the North-Eastern Frontier Hills.

In regard to race, however, it has been found impossible to draw any very distinct line between the aborigines and Hindoo races, as they

Mixed races.

merge insensibly into one another. Besides the two million of western aborigines using their own language, there are probably at least as many people in Chota Nagpore, the western districts of Bengal, and the confines of Behar, who avowedly belong to aboriginal tribes, but who have adopted the Hindustanee or Bengalee language; and there are both in Bengal and Behar large numbers of low castes and out-castes which are probably very aboriginal in blood and can scarcely be said to be Hindoo in any real sense, though they are put down as such. The system of castes in the Hindoo religion gives room for the introduction of any number of outsiders;—so long as people do not interfere with established castes, they may form a new caste, and call themselves Hindoos if they like; and the Brahmins are always ready to receive all who will submit to them and pay them. The process of manufacturing Rajpoots from ambitious aborigines goes on before our eyes, and both in the west and the east many new Hindoos exist who are in no degree Hindoo in blood. The low castes, however, keep to deities and religious observances of their own, are not recognized by Hindoos, and are only put down as Hindoos because they do not come under any other general name. Classified as nearly as possible according to race, we have returned 3,390,578 pure aborigines, and

10,088,491 semi-Hindooised aborigines to 31,154,256 Hindoos and 624,276 unclassified. Roughly we might say that the population consists of $31\frac{1}{2}$ millions of Hindoos, 21 millions Mahomedans, and 14 millions aborigines, the three classes being in the proportion of 9, 6, and 4.

The ethnical varieties observable in the people of Bengal do not, however, end with the broad distinctions of nationality. Within each nation-

CASTES AND TRIBES.

ality there are in fact numerous tribes and castes, which clearly indicate a difference of origin and race; and even where no distinction of race can be found, we frequently meet with tribal sub-divisions with their own ethnical peculiarities. The number of separate tribes and castes which have been found to exist in Bengal do not probably fall short of one thousand. If their respective sub-divisions and departments or classes were taken into account, they would probably amount to many thousands. The aboriginal tribes alone are very numerous, while those for whom, though Hindooised to a certain extent, an aboriginal origin may be claimed, would swell the number by a very large amount. No attempt will be made in this place to give a full account of the numerous castes and tribes which have been mentioned in the census returns. The principal castes and tribes alone will be alluded to.

In Bengal Proper the aboriginal population is 387,157, of whom 139,761 are Sonthals. Sonthals are to be found in nearly all the districts of

Bengal Proper.

the provinces, but most largely in Midnapore, where they number 96,921; in Bancoorah, where they are 25,378; and in Beerbhoom, where they are 6,954. The total aboriginal population in the great Midnapore district is 138,350; the majority of these are Sonthals, but there are 35,344 of the Bhumij race.

The semi-Hindooised aboriginals comprise 5,110,989 inhabitants; 1,620,545 are Chundals, 739,886 are Rajbunshees, 680,278 are Bagdis, 393,490 are Chamars and Muchis, 354,450 are Palis. The Chundals are the great pariah caste, to which were doubtless consigned the great bulk of the aboriginal tribes who embraced Hindooism in Bengal. They are a hardy and almost semi-amphibious people, most numerous in the eastern districts of Jessore, Furreedpore, Backergunge, Dacca, Mymensingh, and Sylhet. The Rajbunshees are much the same as the Palis of Dinagepore and Maldah, and the Kochs of Rungpore, and united these castes number considerably over a million souls. They are mostly cultivators, and are evidently an Indo-Chinese race. The Bagdis are the fishermen and palkee-bearers of Western Bengal. In Burdwan alone they number 205,074; they are probably allied to the Baoris (199,968), who are found in the same localities. The Muchis prepare hides and work in leather; they are distributed all over the province, and are to be found in every village: in the 24-Pergunnahs there are more than 70,000 Muchis, and in Burdwan and Nuddea more than 50,000 each. Mals or Malos are more or less numerous in every district in Bengal: the total number found is 115,704, largely distributed in Bancoorah, Beerbhoom, Moorshedabad, Mymensingh, Sylhet, and less thickly in Nuddea, Moorshedabad, Maldah, and Furreedpore. They are boatmen and fishermen.

Among Hindoos in Bengal Proper, the Brahmans, the Chettries or Rajpoots, the Boidyas, and the Kayasths, are the superior castes. There are 1,100,105 Brahmans in the province, who are most numerous in Burdwan (160,824), in the 24-Pergunnahs (120,102), in Midnapore (118,700), and in Hooghly with Howrah (107,534), but they are numerous in all the districts. The Kayasths of Bengal (1,160,478) claim almost equal rank with Brahmans; they exceed the Brahmans in number, and with them form the literary class of the country. Kayasths are most numerous in Backergunge (125,164), Mymensingh (105,537), Dacca (102,084), Midnapore (101,663), and in Jessore, Sylhet, 24-Pergunnahs, Chittagong, and Burdwan, where they vary in number from 50 to 100,000. The Rajpoots (117,508) in Lower Bengal are not numerous in any district. The Boidyas number 68,353.

The Gandhabanias or Banias are the most populous of the trading castes. They number 127,178, of which 32,105 are in Burdwan alone.

Among pastoral castes the Goalas are alone of importance. They number 625,163, of whom 99,325 are in Burdwan, 91,269 in Nuddea, and 88,551 in the 24-Pergunnahs. They are freely distributed, though in less numbers, over all the other districts.

The great cultivating Hindoo castes of Bengal are the Koibortto and Sadgop. Of these the former number over two millions. They are most numerous in Midnapore, Hooghly, 24-Pergunnahs, Sylhet, Nuddea, and Moorshedabad. The caste is divided into two classes, the Chasha or Haliya Koibortto, who are cultivators, and the Jalya Koiborttos, who are fishermen. The Sadgops are the highest among the cultivating Hindoo castes of Bengal. They are included among the Nobosakhs, from whose hands a Brahman will receive water. They number over 630,000, thus exceeding the number of Goalas, the parent caste, from which they are said to have sprung. Sadgops are most numerous in Burdwan and Beerbhoom. The Agoorees (70,606) appear to have their home almost exclusively in the district of Burdwan. The Baruis (156,807) are *pān* cultivators; the Tamlis (59,726) are *pān* sellers, and not unfrequently are wealthy mahajuns. They form a tolerably numerous class in Bengal, especially in those districts like Jessore, Backergunge, and Sylhet, where the *supari* palm is grown. The Puras (12,988) are vegetable sellers, and seem to be confined to the lower central districts.

Among the boating and fishing castes, the Jaliyas (361,917) occupy the first place. They are most numerous in Jessore, but are to be found everywhere. The Tiyars (331,661) are a numerous body, most abundant in Rungpore, where alone they number 141,213, and it is probable that a large number of low castes in the lower delta, who devote themselves to fishing, have assumed the name. The Pods (293,121) are almost entirely found in the district of the 24-Pergunnahs. Patnis (127,636) are ferry men everywhere, but are principally found in Sylhet, Mymensingh, and Cachar. The Metiyas (24,662), nearly all found in Burdwan, are fishmongers.

Of the artizan castes, the oilmen are the most important, numbering altogether, Telis, Tilis, and Kaloos, 572,659. Some of these are men of wealth. They are most numerous in the Burdwan and Midnapore

districts. Of Sunris or wine-sellers, there are 430,582, of whom 63,511 are in the Dacca district; of Kumars or potters, 281,758, and of Kamars 250,285; both of these castes are most numerous in the Presidency and Burdwan divisions.

The number of weaving castes in Bengal are very numerous. The most important are the Jugi, the Tanti, and the Kopali. They are found in greatest number in the districts of Midnapore, 24-Pergunnahs, Sylhet, Tipperah, and Jessore. The total of these castes in Lower Bengal is 963,176.

Among the Hindoos who no longer recognize caste, we have 428,000 Baisnabs or Boistobs. They are most abundant in the districts of the Presidency and Burdwan divisions. A good account of them will be found at pages 189 and 190 of Mr. Beverley's Report.

Of aboriginal tribes in the province of Behar, the Sonthals (485,948) are very much the most numerous. The total of the aboriginal tribes in the Sonthal Pergunnahs is 557,279. Nearly 70,000 of these are Paharcas of the Rajmehal hills. The Dhangurs (20,712), who are so well known as emigrating for labour in Bengal Proper, are found in small numbers in the western districts, but are numerous in Bhaugulpore, Purneah, and the Sonthal Pergunnahs. The Bhars (21,151) are to be found only in Shahabad, Sarun, and Chumparun. Kharwars (20,188) also are found in the same place on the plateau parallel to the Grand Trunk Road in Shahabad; but another band of them exists on the other side of the Ganges. Tharus (21,863) are found almost entirely in the Terai to the north of Chumparun. The remaining aboriginal tribes of the Behar province are less numerous.

The semi-Hindooised aboriginals amount to nearly three millions. The most numerous are Dosadhs (893,989), the ordinary labouring class, who have almost monopolised the office of chowkidar in Behar. There are 711,721 Chamars or Muchis, numerous in every district, in the province. The Musahars also (426,908) are abundantly found. They are much sought after by indigo planters as labourers in the factories. The Bhuiyas (214,742), who are akin to, if not identical with, the Musahars, are not numerous in Behar Proper; but in the south of Gya, in south Bhaugulpore, and in the Sonthal Pergunnahs, they abound. Pasees (122,520) are one of the most remarkable of the semi-Hindooised aborigines. They are much employed as watchmen in the North-Western Provinces, but their chief occupation in Behar is the manufacture and sale of the fermented juice of the date and *tar* palms. They are more numerous in Patna than elsewhere, and sometimes are men of substance. The Bindis (110,714) are generally fishermen, but also labourers. The Domes (100,114) are a remarkable race, impure from their calling, and Hindoo in nothing but name. They have nevertheless obtained the absolute right of making the pyre on which the Hindoo is burned, and of providing the means of lighting it. They are the scavengers of the community, but also make baskets, play musical instruments, and are fishermen. The Magheya Domes and the Rajwars (53,106) are the only tribes who may be called habitually criminal

Brahmins number 359,799, and among them are many peculiar to Orissa, who are generally known in Bengal as belonging to the Utkool Sreni. There are no pure Khettrees in Orissa, but the tributary chiefs claim the title for themselves and their immediate followers. The so-called Rajpoots (22,237) are lower in the social scale, being employed as messengers, constables, and door-keepers. The Khundaits or swordsmen (447,688) are an important class in Orissa. Originally they composed the militia, which was maintained by the ancient Rajas of the country. The land was partitioned amongst them, and held by them on strictly military tenures. They thus became cultivators, and are now hardly to be distinguished from the great body who belong to the Chasa or agricultural caste. The Karan Kayasth, or writer caste, of Orissa number 113,434.

The Goar (275,533) is the great pastoral caste of Orissa, corresponding to the Goalas of Behar and Bengal.

The agriculturists (808,515) call themselves of the Chasa caste. The Gola, the Or, the Paik, Raju, and Sud, are only sub-divisions of this caste.

The population of Chota Nagpore is composed of over two millions of aboriginal tribes, about a million and a half of Hindoos, and a

Chota Nagpore.

few non-Asiatics and Mahomedans.

Among the aboriginal tribes about a million and a quarter are very primitive even in the present day; rather more than three-quarters of a million have been subjected to Hindooising influences. The Kols mentioned in the returns number 292,036. The word Kol is merely a generic term, and does not express the tribe to which the persons so returned belong. More than half the number of Kols are found in Singhbhum, and are really the Hos of that district; the rest are probably Mundas. The Mundas number 190,095 souls, most of whom are in Lohardugga. Grouping Dhangars as Oraons, we have a total of 208,343 souls for that tribe. Three-fourths of them are found in Lohardugga; they speak a language allied to Tamil, Gond, and other Dravidian tongues, and are still free from Hindooising influences. They are industrious cultivators, and well known wherever good, honest, hard work is to be done. The Bhumijs (128,289) are closely allied to the Mundas, whose language they speak, and are found in large numbers in Maunbhoom and Singhbhum. A considerable number (33,440) are also found in Orissa, and a few are scattered, as we have seen, through the various districts of Bengal. Gonds (65,059) are found in all the Tributary Mehals of this province; the largest number being returned in Sirgoojah, which borders on the Central Provinces. The Sonthals in the province number 220,096 souls; they are mainly located in Maunbhoom (132,445), Singhbhum, and Hazareebaugh. Among the tribes grouped as semi-Hindooised, the Bhuiyas are the most numerous, numbering 184,089 souls. The Kharwars number 137,505. These are mainly found in Hazaribagh, but are numerous in the other districts also.

Passing on to the million and a half of Hindoos who have made their way into the province, we find one-third of them in Maunbhoom,

about 400,000 in each of the districts of Hazaribagh and Lohardugga, and comparatively few in Singhbhum and the Tributary Mehals. The Brahmins number 109,640, and the Rajpoots 83,762. 12,155 Babbuns are found in Palamow and Hazaribagh.

The most important agricultural caste is the Koormi, who number nearly a quarter of a million, and are numerous in each of the four districts, and particularly in Maunbhoom. Next to them come the Koeris, mainly located in Hazaribagh and Lohardugga.

Considering its small population, Assam presents greater varieties of race than any other province in Bengal.

The Kacharis (204,900) are found in large numbers throughout Assam, especially in the districts of Goalpara, Kamroop, and Durrung. They are the cream of the population, and a very fine race indeed. The Khasias, who dwell on the range of hills which separates the valley of Assam from the districts of Mymensing and Sylhet, number 92,070. The Nagas (56,046) are a numerous tribe of mountaineers, who inhabit the hills to the south of the districts of Sebsaugor and Durrung, a portion of which country now forms what is known as the Naga Hills district. In the district of Nowgong we find a cluster of hills standing out in the midst of the valley, and unconnected with the Garo Khasia range. These hills are inhabited by a tribe called the Mikirs, who number nearly 60,000 souls. They appear to be industrious cultivators, very little Hindooised, and to devote themselves mainly to the growth of cotton. A few Mishmis and Khamtis are found settled in Luckimpore. A very few Duphlas are mentioned in the returns, but the Miris are tolerably numerous in Durrung, Sebsaugor, and Luckimpore. Some Singhphoos are also returned.

Amongst the semi-Hindooised aboriginals, the Ahoms (128,980) naturally occupy a prominent position. For four and a half centuries the Ahoms were the ruling power in Upper Assam, and for the latter half of that period their sway is said to have extended over the greater part of the present province. They have priests of their own, who are called Deodhai or Bilong. The Burooahs, of whom a few are enumerated, appear to be a second class of hereditary officials. None of the Phookans, the first class, are mentioned in the returns. The Chutiyas, who also belong chiefly to Sebsaugor, are said to have been masters of Assam until conquered by the Ahoms and Kochs. They now number 51,482. The Kochs are most numerous in Lower Assam, where they may be set down at 300,000, extending as far as the Sebsaugor district. They are supposed to have overthrown the Chutiya dynasty in Kamroop about the same time that the Ahoms made themselves masters of Upper Assam. Most of the people mentioned in this paragraph are now Hindoos to all intents and purposes.

Passing to the ordinary Hindoos, the main point to be noted is the small number of Hindoos of the ordinary castes to be found in the province. The Brahmins (58,528) mostly profess astrology. The Kolitas are said to have been priests of the Koch, and certainly appear to have been a superior caste. They now number 179,060, and form the great agricultural caste of the province.

If we exclude Hill Tipperah and the Naga and Garo Hills, in which the mere numbers of the inhabitants were estimated without distinction of sex, the population of Bengal is divided into 33,398,605 males and 33,274,740 females.

In Europe it has been accepted as the rule that the number of females in the aggregate will be slightly in excess of the number of the males. In India, on the other hand, it has generally been found that the males are greatly in excess of the females. In Bengal there are 99·6 females to every 100 males, a preponderance of males so small as to amount to a practical equality.

Proportion of the sexes in Bengal nearly equal.

The proportion of the sexes to each other varies considerably in different parts of the country. Thus :

In the Burdwan division, we find an excess of 142,741 females or 2·0 per cent.

" Presidency	"	3,948	"	0·0
" Rajshahye	"	51,128	"	4·9
" Cooch Behar	"	55,564	"	0·6
" Dacca	"	2,074 females	"	0·0
" Chittagong	"	168,031	"	1·3
" Patna	"	27,223 males	"	0·4
" Bhagulporo	"	37,877 females	"	0·9
" Orissa	"	14,139 males	"	1·0
" Chota Nagpore	"	73,927	"	3·6
" Assam	"			

With one or two exceptions, these results are just what might have been expected. We know that large numbers of clerks, laborers, and others, come to take service in Calcutta and its neighbourhood, leaving their families behind in Burdwan. Palkee-bearers and domestic servants similarly come up from Orissa. The Patna division supplies up-country servants to all Bengal, besides a fair proportion of the soldiers of the native army. The imported labour of the tea districts naturally comprehends a majority of males. The Chittagong division, from its maritime position, exhibits some excess of females. The time the census was taken large numbers of labourers and reapers had gone forth from the countries of surplus labour, and were therefore absent from their homes. It appears that there was a movement of males from the central districts of Bengal to the extreme north on the one hand, and the extreme south on the other. In the central parts of Behar and Bengal the females preponderate; while in the parts bordering on the northern frontier, as well as in those at the extreme south of the delta, there is a large excess of males. The preponderance of one sex over the other prevails in well-defined zones of countries. It is suggested by Mr. Beverley that when the next census is taken, another season should be selected, when the people have not the same inducement to leave their homes.

No detailed classification of age was required in the Bengal census.

Proportion of children very large. All that was attempted was to distinguish between children and adults—the age of twelve years being taken as the limits of childhood. The Lieutenant-Governor concurs with Mr. Beverley in thinking that this

decision was a right one. Inquiries regarding the age of individuals would have been certain to cause difficulty, and the results when obtained would not have been valuable. There is hardly one native in a thousand who knows how old he is, and the information collected on the point must have been more or less untrustworthy. Even in the simple distinction of children from adults, the results cannot be depended on. It will be seen that the boys everywhere largely exceed the girls, while the number of adult men always falls short of that of adult women. The explanation of this, however, is obvious. Girls arrive at maturity sooner than boys, and many of them are returned as women while males of the same age continue to be classed as boys. In this country also girls are married while mere children, and are not unfrequently mothers at the age of fourteen. They come to be looked upon as women at an earlier age than that at which a boy would be reckoned to have attained manhood.

Excluding Hill Tipperah and the Naga and Garo Hills as before, the total number of persons returned as under twelve years of age is 22,995,977, against 43,676,702 returned as being over that age. Distinguishing these classes as children and adults respectively, we find that of the former class 12,530,272 are males and 10,465,705 females. Among the adults 20,868,333 are males and 22,808,369 are females. Thus 34·5 per cent. of the population is said to be under twelve years of age, and 65·5 per cent. over that age. The proportion per cent. of the adults and children of each sex according to the returns is as follows: men, 31·3; boys, 18·8; women, 34·2; girls, 15·7.

The excessive proportion of children in an Indian population, as contrasted with European countries, has been frequently brought to notice. In the North-West, at the census of 1865, the proportion per cent. of children under twelve in the population was found to be 35·58; in the Punjab it was 35·42; in Oudh, 36; and now in Bengal it is 34·5. In England, which of all European countries has the largest proportionate number of children, the percentage up to twelve years of age upon the total population is 29·44.

Arranging the figures for each division, Mr. Beverley shows the following results:—

In the Burdwan division the children form 30·9 per cent. of the population.			
Presidency	"	"	30·8
Rajshahye	"	"	34·0
Cooch Behar	"	"	34·0
Dacca	"	"	35·5
Chittagong	"	"	37·9
Patna	"	"	34·4
Bhaugulpore	"	"	36·2
Orissa	"	"	35·5
Chota Nagpore	"	"	38·6
Assam	"	"	35·7

In the Burdwan and Presidency divisions, therefore, the proportion of children appears to be abnormally low for India; in Chittagong and Bhaugulpore, and especially Chota Nagpore, it is much above the general average for Bengal.

"In the Burdwan division," Mr. Beverley says, "we find that in the Hooghly and Burdwan districts, where the epidemic fever has

been raging, the proportion of children in the population is not more than 29·2 and 29·4 respectively. In Beerbhoom the percentage is 31·4; in Midnapore, 32·3; and in Bancoorah, where there has been no fever at all, 33·6."

Calcutta has only 14·8 per cent. of its population under 12 years of age. This is of course explained by its existence as an emporium of trade—a *colluvies gentium*, where male adults from all parts of the world settle temporarily for purposes of trade without becoming permanent residents.

In the Orissa, Rajshahye, Dacca, and Chittagong divisions, the distribution of children is more even, and calls for no special remark.

In Behar the percentage is fully up to the average. In the Sonthal Pergunnahs the children are remarkably numerous, forming as much as 40·7 per cent of the population. In the Sonthal villages, in that portion of the Damun-i-koh which lies in Rajmehal, the children under 12 constitute 47·5 per cent of the population. In Godda the percentage is 46·5. In the Paharia villages the percentage of children is 41 and 40·5 respectively.

In the Chota Nagpore division we find the proportion of children as follows in each district:—

In Hazareebagh	36·4 per cent.
Lohardugga ...	40·4
Singhbhoom ...	40·0
Maunbhoom ...	37·1
Tributary Mehals	40·4

In Assam the proportion of children is large; yet it is said that the population of Assam does not increase,—a fact, if it be a fact, which demands inquiry.

The proportion of children is greater among Mahomedans than among Hindoos in Bengal. In some cases the difference is only slight, that is in Behar and elsewhere where the Mahomedans chiefly belong to the upper classes. But in the districts where the Mahomedans are more numerous—in the central and eastern districts—the Mahomedans would seem to have very much larger families than the Hindoos. In the Dacca and Chittagong divisions the difference is considerable, the percentage of children among Mahomedans being as much as 38·2 and 40·4 respectively. In Dacca, Mymensingh, and Sylhet, the children of Mahomedans are nearly one-fourth as numerous again as those of Hindoos. In Tipperah the percentage among Mahomedans is 39·2; among Hindoos only 29·4. It is where the Mahomedans form the great bulk of the agricultural class that their children are most numerous.

But relatively the children are most numerous among the aboriginal tribes. These tribes indeed seem to be the most prolific race in India. The western aborigines are every day sending colonies into Bengal, besides furnishing emigrant labourers for the tea districts and for countries beyond the sea.

The detailed figures in regard to occupations are perhaps not altogether trustworthy. The principal division into agriculturalists and non-agriculturalists cannot very well be

OCCUPATION OF THE PEOPLE.

Agricultural.

defined, because many persons who have trades and professions hold or cultivate land as well, and most of the labourers so classed are agricultural, while many others, who come under caste names implying trades, are really cultivators, pure and simple. The Lieutenant-Governor has little doubt that a larger proportion than are shown do in fact live by agricultural pursuits, or by trades directly connected with agriculture. Statement VI appended to this chapter shows the occupations of the adult males included in each of the provinces of Bengal. Out of nearly 21 millions of adult males more than 13 millions fall within the agricultural class. The merchant and trading classes

Non-agricultural.

number nearly a million and a quarter ; the artisans two and a quarter million ; persons in service over a million, the great bulk of whom, if there were accurate detailed information, would probably fall under one of the other classes. Professional persons number nearly 400,000, but this class includes many such as drummers and dancers, whose claim to practise a profession may be fairly questioned. We have a total of $7\frac{3}{4}$ millions of non-agriculturist adult males, to 13 millions of agriculturalists, but there is no doubt that a large number not specifically described as agricultural, and therefore omitted from that class, should have been shown in it. Our knowledge of the occupations of the people as derived from the census is, however, limited to these general facts. The detailed occupation tables of Mr. Beverley's report are not to be depended on as accurate.

The extraordinary absence of large towns is one of the most remarkable statistical features of Bengal. The population beyond Calcutta and the suburbs seems to be almost

Absence of large towns.

wholly rural. Patna has 159,000 people, and there are a few second-rate towns in Behar. In Bengal proper the largest town is Dacca, 69,000. The supposed great city of Moorshedabad, the seat of the Nawab Nazim and his numerous followers, even including some outlying places not properly in the city, has only 46,000 souls ; and there is not another town above 31,000, and scarcely a dozen averaging 20,000 each. Rungpore, the capital of the great district of Rungpore, contains 6,100 souls, and Jessore, 8,152 ; each of these districts having a population of over two millions.

The census of towns was ordinarily effected by the municipal authorities, and the manner of taking it was pretty much the same everywhere. In most towns the census were completed in a single night. In the North-Western Provinces it is said that it is in the towns that the greatest difficulties are met with in taking a census ; but in Bengal the towns, such as they are, are found to be more manageable than the rural districts. A question indeed was raised as to the accuracy of the returns from some of the Behar towns and from Dacca, but the special reports which were called for and have

been received on the subject leave no room for the expression of serious doubt.

The census of Calcutta was effected under the superintendence of the city municipality. As the original papers have been destroyed, it is now impossible to test in any way the accuracy of the returns of the population. But there are reasons for believing them not to be very trustworthy. There are a large number of inconsistencies and inaccuracies in the totals, and in the classified lists. It can scarcely be doubted that the census of Calcutta was inaccurately taken, but as to what extent error exists, it is almost impossible to hazard an opinion. It is probable that the real population exceeds what is shown in the census figures.

In any case the population of Calcutta and its suburbs is really large. It is quite out of place to compare the nominal population of Madras and Bombay with Calcutta, because, while they, it is believed, include large areas of a suburban character, Calcutta proper is really in some sense only what the city of London is to real London. The Circular Road, which separates Calcutta from the suburbs, is a street which no stranger would suppose to be anything but a Calcutta street.

To get the population of Calcutta we must take then at least—

Calcutta	447,601
The Suburban Municipality	257,149
The further suburbs known as the North and South Suburban towns	89,895
Howrah, the Southwark of Calcutta, on the opposite side of the river	97,784
	<hr/> 892,429

It may further be said that the towns of Serampore, Chinsurah, and Hooghly on one railway, and Barrackpore, Dum-Dum, and other places on the other railway, are practically suburbs of Calcutta; and that of the 3,500,000 inhabitants of Hooghly and the 24-Pergunnahs, a large proportion are in fact connected with Calcutta. Under these circumstances it is much to be regretted that the Calcutta census should have been so imperfect. The census here was taken with more detail than in the interior, and the results, if properly arrived at and reported, would have been more interesting and important than elsewhere.

The statistics regarding persons afflicted with infirmities are probably not very accurate, and we must await another occasion before we can draw any trustworthy conclusions from the figures that have been furnished. A good deal of failure has unfortunately also, it is feared, attended the inquiries which were instituted regarding the existing schools in the country and the number of persons attending them. This decision was not taken till quite the close of 1871, and the requisite forms did not reach the enumerators in many instances until too late.

From a financial point of view the census was extraordinarily successful. The total charges connected with the census aggregated to £21,600. For a population of sixty-seven millions this is equivalent to a charge of about one farthing per head. At the last census of England the cost of the enumeration alone of a population of 22½ millions was £78,209. The census of 1861 cost £139,885. The American census of 1850 for 23 millions cost upwards of £300,000.

Since Mr. Beverley has gone home on his well-earned furlough, of which he availed himself very early in 1873, the charge of the census office has devolved upon Mr. C. F. Magrath, Inspector of Registration. This officer has now been employed for some months in the laborious compilation of a summary of the census returns for each district. These are now completed, and have been printed and supplied to the local offices. They are in each district prefixed to a book, in which the population of every town and village is entered with the main divisions of the population into male and female, Mahomedan, Hindoo or "other" religion, and the caste and tribal divisions are also given carefully and fully. The original census returns are carefully preserved, arranged village by village and thannah by thannah, so as to be available for future reference.

In order to show the general results of the census, the Lieutenant-Governor has directed the following abstract statements to be appended to the present chapter of this report:—

- I. Area and population of the several provinces of Bengal.
- II. Abstract of the area and population of each district in Bengal, arranged according to provinces and Commissioners' divisions.
- III. General statement of the result of the census of Bengal, arranged with reference to age and sex.
- IV. General statement of the result of the census of Bengal, arranged with reference to religion and occupation.
- V. Statement showing the population of each of the provinces of Bengal, arranged according to race, class, or nationality.
- VI. Statement showing occupations of the adult males included in the census of each of the provinces of Bengal.

CENSUS OF BENGAL, 1872.

I.—Area and Population of the several PROVINCES of Bengal.

PROVINCES.	Area in square miles.	Total population.	Average number of persons to the square mile.	Proportion per cent. of the area of the several provinces.	Proportion per cent. of the population in the several provinces.
The entire Territory under the Lieutenant-Governor of Bengal	248,231	66,856,859	269	100	100
Bengal	94,539	36,769,735	389	38·08	55·00
Behar	42,417	19,736,101	465	17·9	29·52
Orissa	23,901	4,317,999	181	9·63	6·46
Chota Nagpore	43,901	3,825,571	87	17·69	5·72
Assam	43,473	2,207,453	51	17·51	3·30

NOTE.—The areas in these tables include 17,399 square miles of wild and sparsely inhabited country, of which no census was taken. Of this area 8,343 square miles represent the wild portion of Luckimpore, 5,341 the Soonderbuns, or the almost uninhabitable jungles and marshes at the mouth of the Delta, and 3,715 the Cuchar Hills. The figures of the second column of this table consequently differ slightly from the area tables given in the district tables following. The areas of large rivers have been excluded throughout the tables.

II.—Abstract of the Area and Population of each DISTRICT in Bengal arranged according to PROVINCES and Commissioners' DIVISIONS.

DIVISION.	District.	Area in square miles.	Number of villages, mouzahs, or townships.	Number of houses.	Total population.	AVERAGES CALCULATED FROM PRECEDING COLUMNS.					
						Persons per square mile.	Villages, mouzahs, or townships per square mile.	Persons per village, mouzah, or township.	Houses per square mile.	Persons per house.	
BENGAL.											
Western Districts.	BURD- WAN	Burdwan ...	3,523	5,191	435,416	2,034,745	578	1.47	392	124	4.7
		Bancoorah ...	1,346	2,028	104,687	526,772	391	1.57	260	78	5.0
		Beerbhoom ...	1,344	2,471	159,910	695,921	518	1.84	282	119	4.3
		Midnapore ...	5,082	12,002	446,045	2,540,963	500	2.55	196	88	5.7
		Howrah with Howrah	1,424	3,190	322,703	1,488,556	1,045	2.24	467	227	4.6
	Total ...	12,719	23,842	1,468,791	7,286,957	573	2.03	282	115	5.0	
Central Districts.	PRESI- DENCY	24 Pergunnahs	2,798	4,980	393,787	2,210,047	793	1.78	443	141	5.6
		Calcutta ...	8	1	38,864	147,601	55,950	12	447,001	4,858	11.0
		Nuddica ...	2,794	4,981	432,601	2,657,648	950	1.78	534	155	6.1
		Jessore ...	3,421	3,691	362,017	1,812,795	530	1.08	491	103	5.2
		Total ...	3,658	4,247	313,690	2,075,021	567	1.10	489	86	6.0
RAJ- SHAHYE...	RAJ- SHAHYE...	Moorshedabad	2,578	3,753	303,561	1,353,026	525	1.46	361	118	4.5
		Dinapore ...	4,126	7,108	261,526	1,501,924	364	1.72	311	64	5.7
		Maldah ...	1,813	2,100	129,579	676,326	373	1.10	322	71	5.2
		Rajshahye ...	2,234	4,228	246,371	1,310,729	587	1.89	310	110	5.3
		Rumapore ...	3,476	4,206	331,079	2,149,972	619	1.21	511	95	6.5
COCH- BEHAN.	COCH- BEHAN.	Bogra ...	1,601	2,666	127,069	694,467	450	1.78	259	85	5.5
		Pubna ...	1,906	2,792	198,220	1,211,691	616	1.42	434	101	6.1
		Total ...	17,694	26,853	1,600,435	8,893,738	593	1.52	351	90	5.6
		Darjeeling ...	1,234	.....	18,864	94,712	77	.....	.....	15	5.0
		Julpizoreo ...	2,906	.....	69,618	418,665	144	.....	.....	24	6.0
Eastern Districts.	Dacca	Cooch Behar ...	1,307	.....	81,820	532,665	497	.....	.....	63	6.5
		Total ...	5,447		170,332	1,045,942	192	..		31	6.1
		Dacca ...	2,897	5,016	290,583	1,852,983	640	1.73	369	100	6.4
		Furzedpore ...	1,496	2,307	157,518	1,012,580	677	1.54	439	105	6.4
		Backergunge ...	4,935	4,269	321,657	2,377,433	482	.87	557	65	7.4
CHITTA- GONG	CHITTA- GONG	Myemsinsing ...	6,293	7,601	308,006	2,349,917	373	1.21	309	49	7.6
		Sylhet ...	5,385	5,789	286,594	1,719,639	319	1.04	304	53	9.0
		Cachar ...	1,286	389	37,311	205,027	160	.3	527	29	5.5
		Total ...	22,289	25,171	1,401,681	9,517,498	427	1.13	378	63	6.8
		Chittagong ...	2,498	1,062	197,104	1,127,402	451	.43	1,002	79	5.7
CHITTA- GONG	CHITTA- GONG	Noakhally ...	1,557	2,034	142,165	713,834	459	1.31	351	91	5.0
		Tipperah ...	2,655	6,150	307,011	1,533,931	578	2.32	249	116	5.0
		Chittagong Hill Tracts	6,882	.....	13,354	69,007	10	.....	.....	2	5.2
		Hill Tipperah.	3,967	.....	6,329	35,282	9	.....	.....	2	5.6
		Total ...	17,459	.....	665,953	3,440,136	199	...	.....	38	5.2
Total for Bengal		85,483	.....	6,405,470	36,769,735	430	.....	.....	78	5.7	

Excluding Sunderbuns and Cachar Hills.—See note on Table I.

Abstract of the Area and Population of each DISTRICT in Bengal arranged according to PROVINCES and Commissioners' DIVISIONS.—(Continued.)

DIVISION.	District.	Area in square miles.	Number of villages, mouzahs, or town- ships.	Number of houses.	Total popu- lation.	AVERAGES CALCULATED FROM PRECED- ING COLUMNS.				
						Persons per square mile.	Villages, mouzahs, or town- ships per square mile.	Persons per village, mou- zah, or town- ship.	Houses per square mile.	Persons per house.
BEHAR.										
PATNA ...	Patna ..	2,101	3,412	209,814	1,559,638	732	1'62	477	128	5'8
	Gya ..	4,718	6,530	327,845	1,948,750	418	1'35	209	69	5'9
	Shahabad ..	4,385	5,110	275,041	1,723,974	393	1'16	337	63	6'3
	Tirhoot ..	6,343	7,387	642,067	4,384,708	691	1'16	598	101	6'8
	Sarun ..	2,654	4,350	203,524	2,068,880	778	1'64	474	111	7'0
	Chumparun ...	8,631	2,290	242,228	1,440,815	408	'65	627	69	5'9
	Total ...	21,732	20,038	2,060,539	13,122,743	553	1'22	462	86	6'4
BRAH- GULPORE	Monkhyr ...	3,913	2,437	324,174	1,812,086	463	'63	736	84	5'5
	Bhaugulpore ..	4,327	2,739	329,372	1,826,290	422	'63	667	70	5'5
	Purneah ..	4,957	4,179	313,447	1,714,706	346	'84	410	63	5'5
	Sonthal Per- gunnahs ...	5,498	9,872	230,504	1,250,287	220	1'80	128	42	5'4
	Total ...	18,685	19,247	1,201,407	6,613,358	354	1'03	344	64	5'6
Total for Behar		42,417	48,285	3,252,036	19,736,101	465	1'14	409	77	6'1
ORISSA.										
ORISSA ...	Cuttack ...	3,178	5,500	281,430	1,404,784	470	1'73	271	88	5'3
	Pooree ...	2,478	3,175	143,920	769,674	311	1'28	242	58	5'3
	Balasore ..	2,066	3,200	138,913	770,232	373	1'58	236	67	5'5
	Tributary Me- hals ...	16,184	10,178	253,284	1,288,300	79	'62	123	16	5'1
	Total for Orissa	23,901	22,119	817,547	4,317,990	180	'92	195	34	5'2
CHOTA NAGPORE.										
CHOTA NAGPORE	Hazareebnash	7,021	6,703	150,493	771,875	110	'95	115	31	5'1
	Lohardugga ..	12,044	6,486	240,843	1,237,123	103	'54	191	29	5'1
	Singhbhoom ..	4,503	3,208	84,416	415,023	92	'71	129	19	4'9
	Mannbhoom ..	4,911	6,368	195,695	995,570	203	1'30	156	40	5'1
	Tributary Me- hals ...	15,419	3,001	80,870	406,980	26	'19	135	5	5'0
	Total for Chota Nagpore ..	43,901	25,766	752,287	3,825,571	87	'89	148	17	5'1
ASSAM.										
COCH B- HAR ...	Goalpara ...	4,433	.....	72,655	444,761	100	...	...	16	6'1
	Kamroop ..	3,631	1,640	103,908	561,681	155	'45	841	29	5'4
	Durrung ..	3,413	137	43,658	236,069	69	'04	1,723	13	5'4
	Nowgong ..	3,646	1,293	44,050	256,390	70	'35	168	12	5'8
	Seebsaugor ..	2,413	203	55,604	296,589	123	'08	1,401	23	5'3
	Luckimpore ..	3,145	125	26,399	121,297	39	'04	970	8	4'6
ASSAM ...	Naga Hills	4,900	.....	.....	68,918	...	...	...	...	...
	Khasi and Jynteah Hills	6,157	.....	...	141,838	...	...	.....	.....	...
	Garro Hills ..	3,390	.....	...	80,000	.....	.....	.....	.....	...
COCH B- HAR ..	Total for Assam* ...	55,180	.....	.....	2,207,453	63	.....	.....	.....	...

* Excluding tracts not cleared.—See note on Table I.

GENERAL STATEMENTS.

III.—General Statement of the Result of the Census

DISTRICTS.	Area in square miles.	Inhabited houses.			
			Men.	Women.	Total adults.
1	2	3	4	5	6
BENGAL.					
WESTERN DISTRICTS.					
<i>Burdwan Division.</i>					
Burdwan	3,523	435,116	661,104	774,895	1,435,999
Bancoorah	1,346	104,647	166,124	183,722	349,846
Beerbhoom	1,344	159,940	214,730	238,815	477,545
Midnapore	5,082	446,045	790,461	914,157	1,718,618
Hooahly with Howrah	1,424	322,703	478,159	575,715	1,053,874
Total ...	12,719	1,408,791	2,323,574	2,712,304	5,035,878
CENTRAL DISTRICTS.					
<i>Presidency Division.</i>					
24-Pargunnahs	2,784	593,737	777,679	748,592	1,526,261
Calcutta	8	38,861	262,677	118,974	381,651
Nudea	3,121	352,017	546,109	670,315	1,216,322
Jessore	3,658	313,600	675,307	731,348	1,406,655
Total ...	9,475	1,098,278	2,261,772	2,269,117	4,530,289
<i>Rajshahye Division.</i>					
Moorsheadabad	2,578	363,561	468,615	570,149	918,764
Dinapore	4,126	264,326	482,736	492,367	975,103
Maldah	1,813	129,579	203,749	238,480	442,229
Rajshahye	2,234	246,371	388,571	449,553	838,124
Rampur	3,476	331,079	703,602	750,140	1,453,742
Bogra	1,501	127,099	216,700	235,822	452,522
Pubna	1,066	194,220	300,918	415,454	716,372
Total ...	17,694	1,600,435	2,773,891	3,002,245	5,806,136
<i>Cooch Behar Division.</i>					
Darjeeling	1,234	18,964	30,585	27,873	64,458
Jalpaigore	2,906	69,648	133,584	134,467	268,051
Cooch Behar	1,307	81,820	176,506	178,613	355,009
Total ...	5,447	170,392	346,565	340,943	687,508
EASTERN DISTRICTS.					
<i>Dacca Division.</i>					
Dacca	2,897	290,503	549,442	644,070	1,193,512
Furzedpore	1,406	157,518	314,518	371,784	686,302
Baekergunge	4,985	321,637	738,019	789,134	1,527,153
Mymensing	6,203	308,008	727,616	790,087	1,517,703
Sylhet	5,333	286,594	526,706	562,766	1,079,472
Cachar	1,285	37,311	69,536	61,781	131,317
Total ...	22,289	1,401,681	2,920,637	3,209,622	6,130,259
<i>Chittagong Division.</i>					
Chittagong	2,498	197,104	287,648	390,501	678,149
Noukhally	1,557	142,155	209,942	230,880	440,822
Tipperah	2,655	307,911	482,644	492,863	975,507
Chittagong Hill Tracts	6,882	13,354	27,904	17,788	45,692
Hill Tipperah	3,867	6,329	.....	.....	.....
Total ...	17,459	685,953	1,008,228	1,132,032	2,140,260
Total for Bengal ...	85,493	6,406,470	11,843,071	12,756,263	24,599,334

of Bengal arranged with reference to Age and Sex.

POPULATION.

CHILDREN UNDER 13 YEARS.			Total males.	Total females.	Total of all classes.	Number per square mile.
Male.	Female.	Total.				
7	8	9	10	11	12	13
334,714	204,032	508,746	985,818	1,038,027	2,031,745	574
95,566	81,300	176,866	261,030	265,082	526,772	301
115,820	102,556	218,376	334,550	301,371	605,921	518
457,733	364,612	822,345	1,257,194	1,283,769	2,540,963	600
244,697	189,985	434,682	722,850	765,700	1,488,556	1,015
1,248,530	1,002,545	2,251,075	3,572,108	3,714,849	7,286,957	573
378,080	305,706	683,786	1,155,759	1,061,288	2,210,047	793
37,780	24,770	66,550	299,857	147,744	447,601	55,350
381,016	265,457	606,473	877,125	936,670	1,812,795	530
375,819	292,547	668,366	1,051,120	1,023,895	2,075,021	567
1,122,695	892,480	2,015,175	3,383,807	3,161,597	6,545,404	663
236,720	198,142	434,862	645,335	708,201	1,353,626	525
293,695	233,126	526,821	776,431	725,103	1,501,924	364
127,338	106,859	234,197	331,047	315,339	676,420	373
262,015	210,610	472,625	650,580	600,143	1,310,729	587
391,424	304,506	695,930	1,095,020	1,054,946	2,149,972	619
131,164	105,791	236,955	347,864	341,603	689,467	459
232,506	193,626	426,222	602,514	600,080	1,211,594	616
1,074,952	1,352,050	3,027,002	4,148,843	4,444,895	8,893,738	563
16,472	13,782	30,254	53,057	41,655	94,712	77
83,309	67,315	150,624	210,803	201,772	418,605	144
102,189	75,307	177,556	278,585	253,980	532,565	407
201,970	156,464	358,434	518,535	497,407	1,045,912	192
356,333	303,148	659,481	905,775	947,218	1,852,993	640
170,536	1142,951	322,147	497,854	514,735	1,012,589	077
466,218	344,063	850,280	1,204,237	1,173,190	2,377,423	482
460,344	871,868	832,214	1,147,962	1,161,955	2,340,917	373
353,624	246,443	640,067	880,330	839,209	1,719,539	319
40,837	32,873	73,710	110,373	94,654	205,027	160
1,856,894	1,521,345	3,378,239	4,786,531	4,730,967	9,517,498	427
246,411	200,842	449,253	530,059	501,343	1,127,402	451
182,125	120,997	273,112	362,067	351,967	713,634	459
299,747	258,677	558,424	782,391	751,540	1,533,931	578
12,889	10,936	23,825	40,883	20,724	60,007	10
.....	.....	.....	.....	.....	35,202	9
713,172	591,442	1,304,614	1,721,400	1,723,474	3,480,136	109
6,813,213	5,516,926	12,335,139	18,461,264	18,273,189	36,769,735	430

III.—General Statement of the Result of the Census

DISTRICTS.	Area in square miles.	Inhabited houses.			
			Men.	Women.	Total adults.
1	2	3	4	5	6
BEHAR.					
<i>Patna Division.</i>					
Patna	2,101	260,814	401,394	557,358	1,048,752
Gya	4,718	327,846	609,653	678,861	1,288,514
Shahabad	4,585	275,041	522,667	615,324	1,137,991
Tirhoot	6,343	642,087	1,377,706	1,495,320	2,873,026
Sarun	2,054	263,524	606,897	713,653	1,320,550
Chumparan	3,631	212,228	406,874	467,028	873,902
Total ...	23,732	2,050,539	4,075,140	4,527,650	8,602,890
<i>Bhaugulpore Division.</i>					
Monghyr	3,913	328,174	553,993	614,778	1,168,761
Bhaugulpore	4,327	329,372	565,141	606,286	1,171,427
Purneah	4,957	313,447	548,669	583,320	1,131,989
Soultal Pergunnahs	5,488	230,504	359,966	386,735	746,700
Total ...	18,685	1,201,497	2,027,648	2,101,089	4,218,737
Total for Behar ...	42,417	3,252,036	6,102,788	6,718,639	12,821,427
ORISSA.					
<i>Orissa Division.</i>					
Cuttack	3,178	281,430	453,857	525,376	979,233
Pooree	2,473	143,920	250,820	256,482	507,302
Balasore	2,006	138,913	232,933	260,707	502,640
Tributary Estates	16,184	253,281	380,185	400,204	780,389
Total for Orissa ...	23,841	817,544	1,326,295	1,460,869	2,787,164
CHOTA NAGPORE.					
<i>Chota Nagpore Division.</i>					
Hazareebaugh	7,621	150,493	233,750	257,539	491,289
Lohardugga	12,044	240,843	347,012	390,211	737,223
Singbhoom	4,503	84,410	110,309	129,840	240,149
Manbhoom	4,914	196,665	295,493	330,264	625,757
Tributary Estates	15,419	80,870	120,742	121,284	242,026
Total for Chota Nagpore ...	43,901	752,287	1,116,946	1,229,138	2,346,084
ASSAM.					
<i>Assam Division.</i>					
Goalpara	4,433	72,655	145,919	145,859	291,778
Kamroop	3,631	103,908	185,461	173,091	358,552
Durrung	3,413	43,538	82,770	75,280	158,050
Nowgong	3,048	44,050	83,460	78,418	161,878
Seeshaugor	2,413	55,604	99,718	90,245	189,963
Luckimpore	3,145	26,398	42,023	36,399	78,422
Naga Hills	4,900	.....	.....	.....	.....
Khasi and Jynteah Hills	6,157	.....	36,882	44,298	81,180
Garo Hills	3,300	.....	.....	.....	.....
Total for Assam ...	35,130	346,173	679,333	643,470	1,322,803
Total country included in Census ...	230,832	11,673,513	20,868,333	22,808,369	43,676,702
Waste and country not censused	17,399	.....	.....	.....	.....
Grand Total ...	248,231	.....	.....	.....	.....

of Bengal arranged with reference to Age and Sex.—(Continued.)

POPULATION.

CHILDREN UNDER 12 YEARS.			Total males.	Total females.	Total of all classes.	Number per square mile.
Male.	Female.	Total.				
7	8	9	10	11	12	13
270,485	240,403	510,888	761,877	797,761	1,559,638	742
344,576	316,740	661,316	954,129	995,021	1,949,150	413
312,717	273,279	585,996	835,374	888,000	1,723,374	303
813,000	607,610	1,420,610	2,191,764	2,192,042	4,383,806	891
380,736	353,524	734,260	906,683	1,007,177	1,913,860	778
270,655	230,258	500,913	737,529	763,286	1,500,815	408
2,402,216	2,117,837	4,520,053	6,477,356	6,645,387	13,122,743	553
343,091	301,134	644,225	897,074	915,912	1,812,986	463
352,032	302,851	654,883	917,183	909,107	1,826,290	422
827,751	255,155	1,082,906	876,820	838,175	1,714,995	346
269,751	242,836	512,587	620,710	620,571	1,241,281	229
1,292,645	1,101,976	2,394,621	3,320,293	3,203,005	6,523,298	354
3,694,891	3,219,813	6,914,704	9,797,649	9,038,452	18,836,101	405
271,973	244,078	516,051	725,330	768,454	1,493,784	470
138,629	123,743	262,372	380,440	380,223	760,663	311
146,144	121,414	267,558	379,077	301,155	680,232	373
257,020	227,810	484,830	640,205	637,104	1,277,309	79
813,766	717,079	1,530,845	2,140,061	2,177,938	4,318,000	180
163,205	117,291	280,496	397,045	374,930	771,975	110
273,938	225,304	499,242	621,548	615,375	1,236,923	163
88,617	77,257	165,874	207,026	207,007	414,033	92
205,503	162,370	367,873	500,636	494,634	995,270	203
85,183	78,771	163,954	205,023	200,035	405,058	20
816,534	663,053	1,479,587	1,933,340	1,892,191	3,825,531	87
63,455	60,528	123,983	229,374	215,387	444,761	100
107,227	95,903	203,130	292,688	294,993	587,681	155
40,067	37,912	77,979	122,837	113,172	236,009	69
49,847	44,805	94,652	133,107	123,263	256,370	70
55,222	51,404	106,626	154,940	141,649	296,589	123
22,689	20,276	42,965	64,692	56,575	121,267	39
.....
28,011	28,947	56,958	68,593	73,245	141,838	.....
.....	.....	.....	.....	.....	80,000	.....
386,898	348,834	735,732	1,066,231	992,304	2,058,535	63
12,530,272	10,465,705	22,995,977	33,398,605	33,274,074	66,672,679	290
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IV.—General Statement of the Result of the Census

DISTRICTS.	Total population.	CLASSIFICATION OF		
		CHRISTIANS.		
		European.	East Indian and other mixed classes.	Native.
1	2	3	4	5
BENGAL.				
WESTERN DISTRICTS.				
<i>Burdwan Division.</i>				
Burdwan	2,034,745	326	207	357
Bancoorah	520,772	28	5	37
Beerbhoom	685,921	86	5	158
Midnapore	2,540,993	122	95	396
Hooghly with Howrah	1,483,556	798	601	1,184
Total ...	7,280,957	1,300	913	2,132
CENTRAL DISTRICTS.				
<i>Presidency Division.</i>				
24-Pergunnahs	2,210,047	3,842	1,326	8,599
Calcutta	447,001	7,265	12,315	1,776
Nudea	1,812,795	153	61	5,764
Jessore	2,075,021	112	29	1,001
Total ...	6,545,464	11,371	13,731	17,140
<i>Rajshahye Division.</i>				
Moorshedabad	1,353,636	104	117	236
Dinagopore	1,501,924	21	.....	250
Maldah	676,426	26	11	6
Rajshahye	1,310,729	101	.....	2
Rungpore	2,149,972	28	13	32
Bogra	689,467	15	4	3
Pubna	1,211,504	29	3	66
Total ...	8,893,738	414	148	585
<i>Cooch Behar Division.</i>				
Darjeeling	94,712	419	1	136
Jalpigoree	418,095	26	6	4
Cooch Behar	532,555	.....	.....	.....
Total ...	1,045,942	445	7	140
EASTERN DISTRICTS.				
<i>Daaca Division.</i>				
Dacca	1,852,003	200	5,762	1,863
Furzedpore	1,012,589	63	21	379
Backergunge	2,377,433	27	127	4,698
Mymensing	2,349,917	31	67	26
Sylhet	1,719,539	43	8	108
Cachar	205,027	236	22	151
Total ...	9,517,498	600	5,997	7,245

NOTE 1.—The figures for the Christian population are taken from the Census tables, though it may be quite possible that for some districts the Christians have been under-stated.

of Bengal arranged with reference to Religion and Occupation.

POPULATION BY RELIGION.				OCCUPATION.		Prevailing languages.
Hindus.	Mahomedans.	Buddhists and Jains.	Others.	Male adult agriculturists.	Male adult non-agriculturists.	
6	7	8	9	10	11	12
1,670,363	348,024	.....	6,468	347,800	313,205	Bengali.
487,786	13,500	.....	25,416	81,306	81,758	Ditto.
576,008	111,795	.....	6,060	166,868	62,364	Ditto.
2,285,568	157,047	.....	97,735	586,937	212,524	Ditto.
1,180,435	209,025	.....	513	233,077	244,182	Ditto.
6,216,060	920,391	.....	137,101	1,400,455	917,123	
1,307,087	867,853	143	1,197	356,003	420,960	Bengali.
201,194	133,131	809	1,051	6,620	255,451	Ditto.
831,032	984,106	.....	1,080	346,543	198,501	Ditto.
915,413	1,151,936	.....	6,530	430,740	244,567	Ditto.
3,334,726	3,157,920	1,012	10,459	1,140,607	1,120,505	
733,056	603,564	.....	16,400	187,774	220,841	Bengali.
702,235	703,215	205	5,908	308,023	113,813	Ditto.
356,298	310,800	.....	9,195	135,487	98,202	Ditto.
286,870	1,017,979	10	5,707	247,407	141,074	Ditto.
857,298	1,291,405	61	1,075	548,997	154,605	Ditto.
130,644	556,620	.....	2,181	171,426	45,274	Ditto.
361,314	847,227	.....	2,955	211,253	158,665	Ditto.
3,427,715	5,420,980	366	43,550	1,871,357	902,534	
60,841	6,248	1,368	16,709	29,877	6,706	Thibetan dialects.
182,375	144,980	8	596	83,022	50,562	Bengali.
.....	.....	.....	.....	100,960	15,436	Ditto.
252,206	151,228	1,376	17,295	278,859	72,706	
798,789	10,50,181	4	1,225	300,704	248,738	Bengali.
420,968	568,239	.....	2,839	188,355	110,363	Ditto.
827,363	1,540,935	4,040	174	498,080	239,329	Ditto.
817,963	1,519,635	.....	12,195	514,667	212,949	Ditto.
859,234	554,131	.....	6,015	347,248	179,468	Ditto.
128,219	74,361	40	1,989	40,462	28,074	Ditto.
3,847,556	5,627,622	4,102	24,487	1,900,726	1,028,911	

NOTE 2.—785,678 agricultural laborers, not classed under agriculture in the Census table (having been there put in 'Miscellaneous' under 'Laborers'), are here classed as agriculturists.

IV.—General Statement of the Result of the Census of Bengal

DISTRICTS.	Total population.	CLASSIFICATION OF		
		CHRISTIANS.		
		Europeans.	East Indians and other mixed classes.	Natives.
1	2	3	4	5
BENGAL.—(Continued.)				
WESTERN DISTRICTS.				
<i>Chittagong Division.</i>				
Chittagong	1,127,402	143	800	42
Nonkhally	713,334	36	191	325
Tipperah	1,533,031	35	16	95
Chittagong Hill Tracts	69,607	30	...	1
Hill Tipperah	35,262	...	...	.....
Total ...	3,480,130	244	1,106	463
Total for Bengal ...	36,709,735	14,443	21,002	27,705
BEHAR.				
<i>Patna Division.</i>				
Patna	1,659,638	1,020	600	480
Gya	1,949,750	102	10	82
Shahabad	1,723,974	257	146	58
Tirhoot	4,384,706	181	36	499
Sarun	2,063,800	95	29	88
Chumperun... ..	1,440,815	85	8	1,214
Total ...	13,122,743	2,340	838	2,416
<i>Bhaugulpore Division</i>				
Monghyr	1,812,986	510	438	194
Bhaugulpore	1,826,290	136	53	363
Purneah	1,714,795	181	130	92
Sonthal Pergunnahs	1,259,287	120	92	180
Total ...	6,613,358	947	693	829
Total for Behar ...	19,736,101	3,287	1,531	3,245
ORISSA.				
<i>Orissa Division.</i>				
Cuttack	1,404,784	192	212	1,910
Pooree	760,674	8	16	352
Balasore	770,232	31	50	449
Tributary Estates	1,283,300	1	.....	302
Total for Orissa ...	4,317,999	232	278	3,113

arranged with reference to Religion and Occupation.—(Continued.)

POPULATION BY RELIGION.				OCCUPATION.		Prevailing languages.
Hindus.	Mahomedans.	Buddhists and Jains.	Others.	Male adult agriculturists.	Male adult non-agriculturists.	
6	7	8	9	10	11	12
301,138 190,253 540,156 508 ...	795,018 539,053 903,564 1,378	30,140 61 .. 47,875	18 15 65 19,725	161,755 151,619 338,530 14,710	125,893 54,323 144,114 13,284	Bengali. Ditto. Ditto. Burmese dialects. Kookie dialects.
1,022,145	2,323,009	78,085	19,823	606,614	341,614	
16,100,434	17,600,135	84,341	252,004	7,250,618	4,393,453	
1,363,201 1,739,809 1,590,043 3,854,901 1,820,048 1,240,264	192,088 219,332 132,671 524,605 241,590 199,237	.... .... .... .... 1	650 316 190 394 14 7	214,709 265,930 272,784 973,707 424,028 842,904	276,685 344,623 249,873 403,998 178,869 123,906	Hindustani. Ditto. Ditto. Ditto. Ditto. Ditto.
11,601,180	1,514,423	1	1,589	2,408,186	1,570,954	
1,613,546 1,690,940 1,022,009 650,210	182,200 169,420 690,149 79,786	34 10	15,905 16,364 2,234 528,390	285,498 336,890 281,752 210,915	288,406 224,241 266,817 149,060	Hindustani. Ditto. Ditto and Bengali. Sonthali, Hindustani, and Bengali.
4,925,714	1,121,630	53	503,492	1,115,945	912,603	
16,528,850	2,636,053	54	565,081	3,613,231	2,489,557	
1,436,040 789,636 738,306 878,655	40,013 11,586 14,878 3,905	19 8 1 1	22,398 17,984 12,427 399,355	267,360 143,201 150,391 254,209	185,997 107,610 82,542 150,886	Ooriya. Ditto. Ditto. Ditto and aboriginal tongues.
3,787,727	74,472	29	452,046	819,251	507,044	

IV.—General Statement of the Result of the Census of Bengal

DISTRICTS.	Total population.	CLASSIFICATION OF		
		CHRISTIANS.		
		Europeans.	East Indians and other mixed classes.	Natives.
1	2	3	4	5
CHOTA NAGPORE.				
<i>Chota Nagpore Division.</i>				
Hazareebaugh	771,875	1,351	52	170
Lohardugga	1,237,123	91	3	12,687
Singbhoom	415,023	20	2	830
Maunbhoom	905,570	39	14	539
Tributary Estates	405,080	.....	.....	.....
Total for Chota Nagpore	3,825,571	1,501	71	14,226
ASSAM.				
<i>Assam Division.</i>				
Goalpara	444,761	27	16	98
Kamroop	561,081	53	31	120
Darrung	236,009	55	6	195
Nowgong	256,390	12	2	165
Sebsaukor	206,580	75	7	201
Luckimpore	121,207	137	9	170
Naga Hills	68,918	.....	.....	.....
Khasi and Jynteah Hills	141,838	.....	.....	.....
Garro Hills	80,000	.....	.....	.....
Total for Assam ...	2,207,453	359	71	940
Grand Total ...	6,056,859	19,822	23,853	49,336

NOTE.—The details of population according to religion of Cooch Behar, Dooars, Hill Tipperah, Naga, Garo, and Khasi Hills, are not shown in this statement. The total, therefore, of the details does not agree with the total population.

arranged with reference to Religion and Occupation.—(Concluded.)

POPULATION BY RELIGION.				OCCUPATION.		Prevailing languages.
Hindus.	Mahomedans.	Buddhists and Jains.	Others.	Male adult agriculturists.	Male adult non-agriculturists.	
6	7	8	9	10	11	12
647,901	72,338	...	49,973	107,625	30,125	Hindustani.
741,062	58,211	.....	424,179	280,319	67,398	Ditto and aboriginal tongues.
209,632	2,487	...	202,052	74,066	44,643	Oriya and aboriginal tongues.
827,936	33,622	.....	133,420	177,525	117,908	Bengali and aboriginal tongues.
139,781	2,348	.....	261,851	106,090	14,648	Aboriginal tongues.
2,567,292	169,006	.. ..	1,073,475	836,134	280,712	
311,419	80,016	.....	6,238	103,602	42,257	Bengali and Indo-Chinese tongues.
515,024	45,823	182	448	157,914	27,647	Assamese and Indo-Chinese tongues.
221,389	13,859	397	108	74,808	7,802	Ditto ditto.
245,615	10,066	201	239	79,213	4,217	Ditto ditto.
282,969	12,619	163	506	77,490	22,238	Ditto ditto.
115,638	3,826	449	1,038	32,877	9,146	Ditto ditto.
.....	.....	.....	...	...	...	Naga languages.
.....	.....	.....	...	...	...	Khasi ditto.
.....	.....	.....	...	...	...	Garo ditto.
1,692,054	176,100	1,472	8,636	520,094	113,267	
42,674,361	20,694,775	86,496	2,351,904	13,051,318	7,774,083	

V.—Statement showing the population of each of the Provinces of Bengal, arranged according to Race, Class, or Nationality.

RACE OR NATIONALITY.	Bengal Proper.	Behar.	Orissa.	Chota Nagpore.	Assam.	Total.
Europeans, Americans, and other Non-Asiatics.	17,135	3,806	239	1,517	412	22,008
Europeans	18,419	1,477	271	53	60	20,279
Non-Indian Asiatics	99,590	2,363	6	3	2,029	103,991
Aborigines, pure	387,157	603,648	367,506	1,290,700	651,765	3,390,578
Semi-Hindooised Aborigines	5,110,099	2,893,483	572,596	797,176	614,248	10,088,491
Hindus	12,425,750	13,290,908	3,231,799	1,824,277	672,522	31,154,256
Mahomedans	17,608,730	2,636,053	74,460	169,000	176,195	20,664,450
Native Christians	27,705	3,246	3,213	14,226	1,034	49,423
Others	415,753	192,619	68,102	28,613	3,189	624,276
Grand Total	36,111,228	19,736,101	4,317,909	3,825,571	2,127,453	66,118,362

NOTE.—The details required for this statement were not obtained in the Bhootan Doars or in the Hill districts of the Eastern Frontier, hence the total falls short of the grand total of the entire population of Bengal. Under the denomination "Others" are included persons of Hindu origin not recognising caste, such as the "Baisnabs," Sanjaysis, Nanukshahis. The great majority of the "Others" are Baisnabs of Bengal Proper.

VI.—Statement showing occupations of the adult males included in the Census of each of the Provinces of Bengal.

OCCUPATIONS.	Bengal Proper.	Behar.	Orissa.	Chota Nagpore.	Assam.	Total.
Agriculture	7,259,618	3,613,231	819,251	836,134	526,084	13,054,318
Public Service	135,368	55,362	28,022	8,632	5,900	231,374
Professions	272,455	61,302	47,460	7,385	4,152	392,700
Private service	631,159	344,553	63,318	42,592	25,341	1,106,943
Commerce and trade	861,236	253,379	50,034	32,037	20,012	1,216,750
Manufactures, including Artizans	1,421,585	590,625	205,340	88,415	16,504	2,321,968
Laborers not classed as agricultural	679,841	1,014,351	71,695	88,120	20,016	1,874,028
Miscellaneous	423,925	170,913	41,108	13,679	29,892	676,587
Total non-agriculturists	4,424,640	2,489,885	507,644	280,880	119,987	7,822,405
Grand Total	11,684,267	6,103,116	1,326,295	1,116,994	646,051	20,876,733

NOTE 1.—There were a certain number of boys under twelve years of age returned as having a separate occupation of their own. These boys were reckoned in the statement of "Occupations of male adults." The occupations of persons in the Hill districts of the Eastern Frontier were not shown in the census returns. The net result of these two discrepancies is as follows:—

Total adult males shown in column 4 of Statement A.	20,868,333
Docto ditto as per this Statement D.	20,876,723
Difference	8,390
Being the number of boys returned as having occupations	46,372
Less the male adult population of Khasi Hills of which no detail of occupations could be given	30,982
	8,390

NOTE 2.—Under "Agriculture," laborers returned as agricultural are included.

NOTE 3.—It is probable that a large proportion of the laborers not specifically classed as agricultural are really employed as agricultural servants.

NOTE 4.—The male adult population of Cooch Behar other than agriculturists, and the whole of the male adult population of Western Doars, are included in "Miscellaneous," as no details of occupation for them are shown in the Census Statement.

CONDITION OF THE PEOPLE.

A PROLONGED discussion on the condition of the Bengal peasantry

Inquiries instituted by order of the Secretary of State, and their result.

took place in consequence of the representations of the Calcutta Missionary Conference that their state was abject and miserable. The reports which were called for from the District Officers showed that on the whole they considered the statements made to have been exaggerated, though it was admitted that the ryots often suffered many things. There was in fact great variety of statements and opinion, but the general outturn was more favorable than the original statement. These proceedings were reported to the Secretary of State in June 1871 by the Government of India, and the opinion was expressed that in some districts at any rate there was "a very considerable foundation of truth in the description of the condition of the people given by the Missionaries." In his reply the Secretary of State noticed the subject as one of extreme importance, which His Grace was convinced would receive early and careful consideration from the Government of Bengal, and added that he awaited with interest the result of the present Lieutenant-Governor's inquiries and deliberations. The condition of the ryots is thus a subject which the present Government of Bengal has been specially charged to watch over and care for. The main end and object of all Sir George Campbell's measures and inquiries has in fact been to approach the solution of this one great question. We have progressed somewhat, and we hope to progress much more towards knowing something of the number and classes of the population, of tenures and rents, rates of wages and prices of food, and other things affecting the condition of the people. The local officers have been specially desired to give us all that they know of such things from year to year, and the annual administration reports that have been received in the present year throw a great deal of light on the subject. Much more information, however, is still necessary to complete our knowledge.

One broad general assertion concerning the condition of the

Condition of people better in Eastern than in Western districts.

people in these provinces may perhaps be hazarded, viz. that they are as a rule comparatively better off in the East, and worse off in the West. They are better off in the former in

two respects, which may be more or less inter-related as cause and consequence. (1) The rate of wages is higher in the East, at the same time that food is for the most part cheaper (Orissa in the West perhaps excepted with respect to cheapness of food); and (2) rents in the East are less screwed up to rack-rent pitch, and probably are lighter in comparison to the productiveness of the soil and remunerative character of such staples as jute, &c.

It is indeed certain that if the practical working of the permanent settlement had accorded with the theory of the Regulations of 1793, if the ryots had fixity of rent as the zemindars have fixity of revenue, the people of Bengal would now be the easiest in India; but it is unfortunately far otherwise, and the degree to which rents have been racked in different districts is in a considerable degree the measure of the comfort or discomfort of the people. In districts to the West, however, where labour is cheap and land is dear, there is this favorable distinction, that the people of some districts emigrate freely, or, what is more common than regular emigration, they go to other parts of the country for temporary service and labour, or go at certain seasons to districts where hands are scarce, like bands of Irish reapers in former days at home. The people of Behar and Orissa thus largely supplement their home means. The people of Chota Nagpore (perhaps of all the countries in India that in which labour is cheapest) do so still more largely and seem in their own country to be pretty well off in their very simple way. This facility of emigrating or going out for labour extends wherever the aboriginal blood predominates; *e.g.*, into the Raneegunge portion of Burdwan, Bancoorah, Beerbhoom, and upper Midnapore.

The tract in which fever has for some years prevailed to a very sad extent is to the east of the districts from which the population emigrates, in an Aryan country. The condition of the people in this country has been a subject on which special attention has been bestowed by Government. The whole of the facts are now being collected and collated by the local officers in accordance with an order of the Government of India directing a particular inquiry into the theory which has been put forward that the lower classes of Hooghly and Burdwan are underfed and ill nourished and so disposed to fever. The opportunity has been taken of desiring all Commissioners of divisions and Magistrates of districts to bring together all the information on similar and kindred questions that they can obtain, and to submit them to Government in a clear and compact form. In the meantime such information as is already at the disposal of Government on the condition of the people in various parts of these provinces is briefly condensed in the ensuing paragraphs of the present report:—

Of the Burdwan division it may be said that the people are upon the whole poorer than the average of the inhabitants in Bengal, and that wages are low except in the vicinity of Calcutta and along the Hooghly River. Throughout the division the lower classes are a poor and improvident people, and although their actual bodily wants are small and easily satisfied, there is but a small approach to anything like an

accumulation of capital among them at present. There is a good deal of emigration from the western borders of the division, but not apparently from the alluvial tracts, or from Beerbhoom.

The census returns show the district of Hooghly and a few thannahs of Midnapore (now invaded by the fever), with two or three thannahs of Burdwan, to be the most populous tracts in these provinces—probably in India. The question arises whether any considerable proportion of the whole population are townspeople and non-agriculturalists? In some parts of Hooghly this is no doubt the case. Allowance must be made for the towns and great villages containing a large town mercantile and fishing population, which fringe the river Hooghly in the Hooghly district, including Howrah in that term. But apart from this we find in the back-lying thannahs of the low and marshy country in a purely rural tract an immense population. Similarly in Midnapore the most crowded thannahs are those in the pit of the low land between the great rivers. Doomjoor (the thannah next to Howrah, with a population rate of 1,417 per mile) may be supposed to be suburban, though it is believed to be really quite rural. Passing this over, however, we have the following thannahs with the population rate given opposite each :—

Juggutbullahpore	1,074	} Of Hooghly.
Amrah ...	1,093	
Khanakool, and	939	
Chanderpore (Oolaberiah)	941	
Dasapore ...	1,311	} Of Midnapore.
Panchkoorah	999	
Debra ...	1,016	

which seem to form a low-lying water and watery tract, stretching from behind Howrah to near Midnapore, absolutely agricultural, without a single town, and still with an average population fully equal to or exceeding 1,000 per square mile of gross area. This population is enormous. On the other hand, living as rural Bengalees do in scattered villages, it is not certain that the country population is necessarily so thick as to affect health. If their health is affected by population, it must either be through poverty or owing to unsanitary habits. This very populated tract is in close proximity to, and in very easy river communication with Calcutta, where there is a great demand for labour at a good price, and it is believed that the fever-stricken peasantry are not specially poor as compared to many other Bengal ryots. The low flesh-eating castes, who in previous years have offered a more successful resistance to the disease, are now observed to succumb equally with others. The entire question of the incidence of the fever in this division is under the anxious consideration of the Lieutenant-Governor, who is sifting the facts most carefully by an organized inquiry, and no pains are being spared to relieve, if possible, the sufferings and depression under which this part of the country has laboured. Happily there is reason to believe that in the parts hitherto most affected the fever is abating.

The condition of the people in the Presidency division is believed to be improving. All ryots have now-a-days become better off owing to the increased price of agricultural produce. It is stated that some years

ago it was not unusual to find even tolerably substantial ryots living on one meal a day; now they have two, and sometimes more, many of them taking a small meal of cold rice, salt, and onions early in the morning. It is, however, not only in the way of a more plentiful supply of food that their condition has been improved: a change for the better is observable in their houses, which are better raised and better constructed. They have a larger supply of clothing, while a *tuktaposh* (bedstead) and a quilt stuffed with cotton have taken the place of the mats on which they lay and of the rags with which they covered themselves. True, the ryots work hard all day to provide for themselves and their families, but the better class of them as a rule now enjoy something more than necessities. "Well-to-do," in the sense of owning substantial property, the great mass of ryots certainly are not; for they are as a rule indebted to the *mahajans* from year to year. But so far as provision for necessities is concerned, the average ryots cannot be said to be very badly off in a prosperous year. The mildness of the climate obviates the necessity for expensive houses and clothing. Their luxuries are few and simple, and their food inexpensive in comparison with the value of their labour.

It is certain at least that the people are fairly prosperous by an Indian standard in the 24-Pergunnahs district. The proximity of Calcutta affords a ready sale and a comparatively high rate of wages; while from the north, south, and west of the district rice is largely raised and exported, and quantities of timber and firewood and thatching leaves can be obtained from the Soonderbuns for the mere trouble of cutting. Immigration into this district is still steady, and there are no complaints of over-population. It is to be regretted that the peasantry of Jessore and Nuddea are not so well off, but in Jessore, though the ryots may be poor, there are many *jotedars*, *gantidars*, and others, who, with their rice fields and date gardens, occupy something of the position of peasant proprietors. In Nuddea the people came wonderfully through the floods, and then and since have shown much self-reliance.

In the large division of Rajshahye there is probably more wide variety. Moorshedabad partakes more of the character of Western districts,

Rajshahye.

and its account is not very favorable. Labour seems to be cheaper, and food dearer than elsewhere. On the other hand, as regards the north-eastern districts, there is no doubt that a more favorable account is correct. The marked improvement among all classes is denoted by the better clothing which is used, by the substitution of metal vessels for earthenware, by the increase in the rate paid for labour, the independence of servants, and by the freedom from debt of the majority of the cultivators. In Rungpore there can be no doubt that with fine produce and favorable tenures and a great demand for labour, the people are very well off, although they are suffering from a temporary discouragement owing to the fall in the price of jute. Again in Dinagpore, with a comparatively sparse population and very productive soil, the people are well off, and will no doubt become much more so when the railway is completed. The Magistrate of Dinagpore expresses the opinion that the people are better off than in other parts

of India, and adduces the testimony of a gentleman who had lately been travelling in Oudh, and who says nothing could be plainer than that the Bengal ryot with a permanent settlement is much better off than the peasantry of Oudh. This comparison, however, can hardly be said to involve a high standard, as the ryots of Oudh, besides forming a dense population, have had less rights recognized than any peasantry in India. When the Magistrate can compare favorably with Bombay, the Punjab, and Madras, we shall have more to pride ourselves upon.

The condition of the people in the districts of Cooch Behar is good. There is no overplus of population. The soil is everywhere fertile,

Cooch Behar.

and want is rare. The cultivator can count on three crops—jute, tobacco, and *dhan*, and often mustard; and the season which may be fatal to one is beneficial to the others. While the population of Cooch Behar, Julpigoree, and Goalparah is essentially agricultural, that of Darjeeling lives partly by labour. Both classes in these tracts are on the increase. A constant stream of laborers from Chuprah and Chota Nagpore flows in from the south, who chiefly seek employment in the tea gardens of the Terai; while the Nepaulese, attracted by high wages or desirous of becoming settlers, come by the western approaches to Darjeeling.

In the division of Dacca also the material condition of the people has certainly improved as compared with what it was only a few years back.

Dacca.

Immense sums of money now come into the country for payment of purchases of country produce; and though a share clings to the fingers of those through whom it passes on its way from the exporting merchant to the cultivators, still there is no doubt that a good proportion of it does reach the ryot. It is stated of the great district of Mymensing that a great many ryots have money put by, though instead of being invested it is for the most part buried. The heavy fall in the jute market during the past year diminished the profits of many cultivators, but produced no general distress. No doubt the mahajun flourishes here as elsewhere, and makes a prey of the improvident and unfortunate; but it would, it is said, be difficult to find a locality where the majority of the inhabitants are in his toils, and the greater part of the crop is mortgaged to him. Land can generally be rented upon comparatively easy terms. From the populous southern districts of the division there is little or no emigration. Even in the sub-division of Moonshigunge in the district of Dacca, with its population of 459,874 people in a tract of 446 miles, or 1,031 to the square mile, and without a single large town, there is no movement of the people to the more sparsely-inhabited parts. There is indeed a spontaneous emigration reported from Sylhet to cultivate the waste lands of Cachar, but it is attributable to no want of prosperity or hardship of living in that district. On the contrary, the ryots of Sylhet are extremely well-to-do and able to enjoy the luxuries of life far more than in most districts. On the whole it may fairly be said that the agricultural class of the inhabitants of Eastern Bengal are in a condition of increasing comfort and independence.

Under the term Eastern Bengal may also be included the Chittagong division. The material condition of the people of Chittagong is said to be very prosperous. The residents are mostly agriculturists, and even day-labourers, domestic servants, &c., have their patch of land, which is cultivated by themselves or their families. That they are well off is manifested by their independence, and the fact that it is sometimes difficult to get labourers even at a fair rate of wages.

The soil is productive, and yields an ample return to very little labour. Bamboos, canes, thatching grass, and firewood, are plentiful, and on unoccupied waste lands may be had for the cutting. Provisions are abundant and generally cheap. The neighbouring province of Arracan affords a remunerative field for the surplus labour of the division, where coolies working can earn, it is said, as much as eight annas a day. The condition of the people has certainly improved of late years. The introduction of English piece-goods has made the price of their clothes cheaper, and they are now better able to pay for them. The houses which used to be built of straw, bamboos, and reed on low marshy land, are now constructed on well-raised lands, and of better and more durable materials. The number of utensils in domestic use is much larger than formerly, and there is much more comfort. The cost of living has increased, but the people are better off. Nearly every one has an acre or so of land in cultivation.

The local officers, on the other hand, all report strongly of the poverty of the ryots in the Patna division, and it is beyond doubt that the people there are really badly off. Late years have not been bad, and food has been comparatively cheap. But it is a good deal dearer than it formerly was, and the wages of labour are still very low. Except during the harvest and planting seasons, the rate of unskilled labour is only one and a half annas per *diem*. Although Gya and Shahabad have an apparent smaller population rate than elsewhere, they have so much of barren hill tracts that in the well-populated area they are practically no doubt just as overcrowded as those districts which show a larger rate. In Gya it is said that the agricultural labourer is worse off than anywhere else in the division. He is generally paid in grain and lives really from hand to mouth. Two or three seers of some coarse grain, representing a money value perhaps of $1\frac{1}{2}$ anna, suffice him to support life and enable him to work. With the Soane work however close at hand, and two annas a day to be earned there, there is a brighter side to the question. The zemindars of this division, especially the smaller landholders, are stated to be oppressive on their tenants. On the larger estates the system of farming out villages widely prevails—a system of profit upon profits, under which the cultivators sadly suffer. Happily emigration is a resource well known to, and in some degree practised by, the people. The emigration beyond seas is after all but a drop in the ocean, but there is much unregistered emigration within India. There is a periodic emigration of labourers from the Sarun district who go to Purneah, Julpigoree, Rungpore, and Cooch Behar. It is notorious that all over the country syces, coolies, and men who go out to earn their bread, come in very

large numbers from the Behar districts, and especially Sarun. We may believe that if they are more and more pressed they will go in greater numbers to populate the colonies, &c., to which they already know the way. Many labourers get, it is stated, to the tea districts without ever being registered before the local Magistrates at all.

There seems to be a good deal of difference of opinion regarding the general condition of the people of the Bhaugulpore division. In the

Bhaugulpore and Monghyr districts the population is large and rents are high; wages, on the other hand, are low—certainly lower than in most districts in Bengal Proper—and very much lower than in the eastern districts. Food also is dearer than in these latter. Wages have risen compared to former times; but so, it is stated, has the price of food. Still the people are for the most part a decidedly industrious people, quiet, simple, and careful. They seem to be content in their small humble way. There is little or no emigration, the small number of emigrants reported being in great part inhabitants of other districts. What emigration does take place is confined to the north-west corner of the division adjoining Tirhoot. In the reports of the eastern districts it is not often said that labourers from Bhaugulpore come to seek for labour. The Magistrate of one district made inquiries during the past cold weather into the condition of the ryot on the frontier territory, and the result is discouraging, in that after very fairly weighing the respective advantages and disadvantages of both, he comes to the conclusion that the condition of the Nepal ryot is on the whole better than that of the British ryot. Although the smaller rent taken from the former by the Nepaulese Government is supplemented by forced labour and the purveyance system, on the other hand the illegal cesses and exactions of zemindars, middlemen, &c., and other vexations, turn the scale against the British cultivator. In Purneah, however, where the population is much more sparse, it is probably a correct statement that the people are better off than elsewhere in the division. They suffer a good deal from fever and from the ravages of the river Koossee; but those who escape these evils are perhaps in their means above the average of the ryots of these provinces.

The people of the Sonthal Pergunnahs are a simple and improvident race. They had in the past earned easily a poor living, and spent their little easily, so long as they had plenty of land, light rents, and little interference in their own jungly country. But since they have been invaded by grasping speculators and adventurers, and the zemindars by these instruments have begun to levy heavy rents and exactions, the Sonthals have felt distress. The account which is given by the Commissioner of the working of the new regulation and new system is, however, decidedly satisfactory. The people are much in favour of the settlement, and the only alarms that have recently been reported are from the Sonthals outside the Pergunnahs, who not unnaturally agitate for the same advantages as have been accorded there. The Pahareas of the Rajmehal hills emigrate not unfrequently to secure labour. These are the savage Rajmehal hillmen who were reclaimed from robbery, but were long notoriously idle; and it is gratifying to know that they now take so much to labour.

The Lieutenant-Governor believes that nowhere have the rents of a peaceable, industrious, and submissive population been more screwed than in the Bhaugulpore division. It was the same action of the zemindars that was lately leading to rebellion in the Sonthal Pergunnahs. As regards particular zemindari estates, however, where the tenantry belong chiefly to low castes, it is stated that they will leave an estate on the smallest provocation, and it is a comfort that the industrious poor are thus able to go off to another estate when exaction is carried to excess. A marked contrast to the condition of the zemindars' ryots is afforded by the tenantry in the Government ryotwar tract of the Damin-i-koh. "Whatever," says the Commissioner, "may stir the minds of the Sonthal population generally, the residents in the Damin are quiet and unmoved. There is no oppression, no levying of cesses and abwabs, the rates of rent are low, and the ryots are well off."

In Orissa there is reason to believe that a change for the better is taking place. Vast sums of money have been spent in the country on irrigation works, and but a small proportion of this is carried away; much of it does and must sink into the country. Labour is abundant and is paid for at remunerative rates. Trade has improved; exports and imports increased. A large number of people are better housed, clothed, and fed, and have more home comforts than formerly. The improvement has probably affected the mercantile classes more than the actual cultivators. Even, however, in remote villages a greater air of comfort may be observed,—a better thatch to the houses, and this in Orissa is one of the best signs of improvement, as it is about the first thing an Ooriah ryot does when he gets his head above water. There are more shops in the towns and larger villages and sub-divisional stations, and the shops which fell to ruin during the famine are restored. At the same time the comparative well-doing of the people is somewhat alloyed by the extreme poverty of a large landless labouring class. The Collector of Balasore writes that he has known many cases where a family only ate food once in two days, and no member of the family had more than one garment. It is fortunate that there are now ample facilities of emigration. The extraordinary increase of the passenger traffic between Calcutta and Orissa by sea is a most gratifying sign that the people are more and more learning to help themselves.

The condition of the Hindoo population of the Chota Nagpore division is said to be tolerable. There are now no more peaceable and loyal subjects in any part of Her Majesty's Indian dominions than in these hill tracts. The disturbances and rebellions of former days have passed into oblivion. The Koles of Singbhoom, who but a few years back were a savage and barbarous population, are now a prosperous people, and their villages are described as often perfect pictures of comfort and prettiness. The ryots, for the most part occupancy men, are not at all dependent on the wealth of their landlords, who do nothing to improve their estates, and leave the ryots to improve their own holdings as best they can. The ryots' condition has no doubt been improved; they have more movable property and more comforts than they had before,

but they declare with truth that if there be improvement, it is entirely owing to their own exertions; and it certainly does not arise from anything their landlords have done for them. On the other hand it must be admitted that although labour is abundant, wages are perhaps lower in Chota Nagpore than almost in any other part of India, and have not risen in proportion to the increase in the price of the ordinary food staples. That the people are on the whole well off, is owing to their freedom from prejudice and local ties, and their industrious disposition, which enables them to go forth from their own country to earn money by labour. The labourers of this division largely emigrate for employment. They pour into all parts of Bengal after their own harvest in December, and return with their modest earnings in May. The tea districts also are mainly recruited with coolies from Chota Nagpore.

There is one sad element in the condition of the people in the Chota Nagpore division. It is stated that in places, in Kharakdea on the one side and in Palamow on the other, a system under which men and even whole families are held as hereditary bondmen is still in full force. Colonel Dalton believes the system to be principally confined to Hindoo or Hindoosised tracts, and that the poorer aborigines do not submit to such bondage. The Lieutenant-Governor trusts every exertion will be made to gradually teach the humble people who submit to such a system that they have rights as other men.

The concurrent testimony of all seems to show that as a rule the indigenous population of Assam is, judged by an Indian standard, very well off. "The agriculturalists," says the Deputy Commissioner of Nowgong, "are really wonderfully well off." "Our ryots," declares the Commissioner, "are much better off, and much more independent, than any class of ryots in the permanently settled districts." Labour is very well paid, food is not dear, and with great abundance of a productive soil, and a sparse population, the Assamese live in comparative comfort, without having to undergo severe toil. The Cacharees are the cream of the population, and are a very fine race indeed.

More than one opinion has been expressed that the indigenous population of Assam is not increasing, and this seems to be the general belief. The cause of this however, if it be a fact, is not so apparent. There is no reason to suppose that the Assamese have reached the advanced stage of civilization in which prudence deters from marriage and checks population; and it seems to be the case that though much opium is consumed, the practice is not carried to such an excess as to have a very ruinous effect on the general population. Moreover, it does not appear that the open and cultivated parts of Assam are specially unhealthy, or that the unhealthiness of the country would account for a complete stagnation or retrogression in population. It has been remarked in the Census chapter of this report that the number of children in Assam is large. In this province, however, where there is a very good indigenous paid agency, and the system of annual settlements gives exceptional means of a knowledge of the country and the people, Government should be in possession of statistics fuller and better than elsewhere; and the Lieutenant-Governor will look both to a careful

working of the specimen areas for vital statistics, as well as to the submission of good and careful returns for the districts generally, to obtain statistics of life which shall truly show the movements of the population and make clear whether it is really so little progressive as is supposed.

But be that as it may, it cannot be expected that the spontaneous progress of population will be particularly rapid, or that the small existing population will multiply so fast as to fill the country speedily. Sir George Campbell thoroughly recognizes that the great want of Assam is population. It seems to be quite beyond doubt that the province once supported a much larger population than at present. The decadence is the result of anarchy and the want of protection against the many wild border tribes. A commencement has been made towards giving that protection which will soon be complete, and if we can only open sufficient channels for population to flow in to fill the vacuum, the province will unquestionably be developed into a most wealthy and productive one. Already in some few cases the immigrants begin to form permanent Bengali villages, and it is to be hoped that this may increase.

Still it is unfortunately the case that Assam is cut off from the rest of India by long distances and difficult routes. The districts of Eastern Bengal, to which it is nearest, are those in which labour is dearest and population most wanted to gather the rich staples developing there; and for immigration from the districts where the population more presses on the means of subsistence, we must have better means of communication before we can expect that it will be free and voluntary to any large extent. The Brahmaputra, the splendid river of Assam, is deficient in the means of navigation in an extreme degree, and boat traffic above Gowhatty is excessively scarce, while the steam service is very dilatory, and unhappily not unfrequently attended with great loss of life. What is undoubtedly most wanted is improved communication from the western districts by road, railway, or improved steam services. This subject has been under the separate consideration of the Lieutenant-Governor, who has issued special orders, with the approval of the Government of India, to promote the increasing traffic and communication between Bengal and Behar and Assam. A Civil officer has already been appointed to inquire into the lines of traffic, and an Engineer officer to examine and survey the ground.

GENERAL SYSTEM OF PUBLIC INSTRUCTION.

THE University of Calcutta is, strictly speaking, an imperial rather than a provincial institution, exercising functions over the Punjab, the North-

CALCUTTA UNIVERSITY.

Western Provinces, Oudh, the Central Provinces, and British Burmah, as well as over Bengal; but its seat is in Bengal, and the majority of its students belong to these provinces.

The Calcutta University was constituted by an Act of the Legislature in 1857, and the preamble of that Act recited that the University

Its functions.

was established "for the better encouragement of Her Majesty's subjects * * * * in the pursuit of a regular and liberal course of education," and "for the purpose of ascertaining, by means of examination, the persons who have acquired proficiency in different branches of literature, science, and art, and of rewarding them by academical degrees." The Calcutta University has no professors, or scholars, or colleges, or schools; its function is to examine and confer degrees. Its Fellows are for the most part Missionaries, Government servants, and others employed in education, or persons filling high Government posts in other departments; the Fellows form the Senate, and they elect six of their own number, who, with the Vice-Chancellor, form the Syndicate or governing body of the University. The four faculties (arts, law, medicine, and engineering) are usually represented in the Syndicate.

Many of the "middle" schools, all the "higher" schools, and all the colleges of Bengal, educate their pupils with a view to the University

Its wide influence.

examinations and degrees, which latter enable students to enter the professions of law, medicine, and engineering, and also the higher branches of the Native Civil Service (executive and judicial). The success of a college or a school is judged very much by the number of its students who pass the several University examinations. The University prescribes the languages, the science and other subjects, and even the text-books for all these examinations. It thus dominates and guides the course of instruction in all Bengal colleges and schools except the very lowest.

The several University examinations are the Entrance Examination, open to all boys above the age of 16 years; the First Arts Examination,

Its standards and degrees.

open to all students who have attended for two years collegiate classes

in any college or high school affiliated to the University; the B.A. or Degree Examination, open to all students of four years' standing in any affiliated institution, who may have passed the First Arts Examination; and the M.A. or Honour Examination. For these examinations the prescribed subjects are—

Entrance.

Languages.	History and Geography.	Mathematics.
English, and one other Indian language, either ancient or modern. Greek or Latin might be taken up as the second language.	English and Indian, according to certain text-books.	Simple Arithmetic. Algebra below quadratic equations. Four books of Euclid.

First Arts.

Languages.	History.	Mathematics.	Psychology and Logic.
English, and either Greek, Latin, Sanskrit, Hebrew, or Arabic. In December 1871, Persian was also made an alternative subject.	Ancient History and Geography.	Arithmetic. Algebra. Euclid. Plane Trigonometry. Elementary Statics and Dynamics.	According to certain text-books.

In March 1872 it was decided that students for the First Arts Examination might take up “the Chemistry of the Metalloids” instead of Psychology.

B.A. Examination.

Languages as in the First Arts Course.	History of India down to 1835; of Greece and Rome, and of the Jews, according to certain text-books.	Mathematics, Mechanics, and Astronomy.	Moral Philosophy and Metaphysics, according to certain text-books.	Applied Mathematics, or Optics, or Chemistry, or Zoology and Physiology, or Geology and Physical Geography.
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In April 1872 the University laid down certain alternative courses for the B.A. Examination which will enable candidates to take up Physical Geography and a Physical Science subject instead of Moral Philosophy and Metaphysics.

Under the head of “special colleges and schools” come the Medical College, the Civil Engineering College, the Mahomedan Madrissas at Hooghly and Calcutta, the School of Arts and Design at Calcutta, and Artizan Schools in different parts of the country.

The Medical College educates native medical practitioners of different grades for the public service, and it also carries private medical students through the courses required for the several examinations and degrees in medicine provided by the University.

Medical College.

Medical degrees and examinations.

The medical examinations and degrees proscribed by the University are:—

First Licentiate of Medicine ...	{	open to all candidates who, after passing the University Entrance Examination, study medicine for three years, and attend prescribed courses of lectures in Anatomy, Materia Medica, Chemistry, Botany, and Physiology; the candidates must also have attended the dissecting room for three winter sessions.
Second Licentiate of Medicine ..	{	open to all candidates who, after passing the First Licentiate Examination, study medicine for two years, attend prescribed courses of lectures, and complete a specified routine of hospital practice.
The Degree of First and Second Bachelor of Medicine ...	{	is conferred after examinations, open to all who, after passing the University First Examination, go through the course required for a First and Second Licentiate, and pass examination in Comparative Anatomy and Zoology.
The Degree of M.D. ...	{	is conferred on Second Bachelors of Medicine who, after a prescribed course of practice, pass a special examination.

Any student who passes the Second Licentiate Examination is qualified for the public service in the grade of Sub-Assistant Surgeon. But

Medical graduates employed in the public service.

the great majority of the students in the Medical College are youths or men who have never passed the University Entrance Examination, and therefore are not eligible for any of the University degrees in medicine. Some of the students are taught their profession through the medium of Bengali; and a three years' course of study in Materia Medica, Anatomy, Surgery, Chemistry, Medicine, Midwifery and Medical Jurisprudence, together with attendance at the hospital and dissecting-room, entitles students to appear at the Final Examination. Successful candidates at this examination receive

As Native Doctors.

certificates as Native Doctors or Hospital Assistants, and are qualified for the independent practice of medicine, or for the public service.

Native Doctors are employed in the public service, or in charitable dispensaries established or aided by Government, but very many more passed students of the Medical College settle down to private practice in Bengal towns and villages.

The "Law" Colleges consist of classes wherein lectures on Indian

Law Colleges.

Law are delivered to under-graduates of the several Government colleges in Bengal. Law, or it may be said the art of Indian litigation, is the only study in Bengal which in any way supports itself. The University has heretofore granted—

Law Degrees.

A degree of Licentiate of Law ...	{	to any student who, having passed the Entrance Examination, studied law at an affiliated college for three years.
A degree of Bachelor of Law ...	{	to any student who passes the B.A. Examination and studies law for at least two years after taking his degree, and for one year before taking his degree
A degree of Honor in Law ...	{	to any Bachelor or Licentiate of law who passes a prescribed examination.
A degree of Doctor of Law ...	{	to any Bachelor of Law who, after taking an Honor degree, writes a special essay to be approved by the President of the Faculty of Law.

The degree of Licentiate in Law will not be granted to any one who did not begin to study law before the 1st January 1871; the

conferment of this degree will therefore very shortly cease. The great majority of law students do not attempt to gain University degrees. A very great many students who obtain no University degree in law, however, take to the lower branches of the legal profession. The present rules require of candidates for pleaderships a certain number of years' attendance at Law Colleges, and do not insist upon candidates possessing a University degree in law.

Another most important special College, which has not hitherto attracted nearly so many students as either Law or Medicine, is the Civil Engineering College. The subjects taught are Surveying, Drawing, Civil Engineering in all its branches, Mathematics, and the Use of Materials, as well as Chemistry and Physical Geography. Ordinarily, students do not join the Civil Engineering College until they have passed the University Entrance Examination; youths who have not passed the Entrance Examination are, however, admissible on payment of a special fee. The degrees in Engineering conferred by the University are—

Licentiate of Engineering	{ open to every student of the Civil Engineering College who completes the three years' course and passes the final examination.
Bachelor of Engineering ...	{ open to any Licentiate who has passed the First Arts Examination of the University.
Degree of Honor in Engineering and Degree of Master of Engineering.	{ to Licentiates or Bachelors who pass a special examination.

At the end of each of the three years of the Civil Engineering College course an examination is held, and students who succeed at these examinations receive certificates of qualification for employment in the Public Works Department. A student who completes one year's course and passes the final examination, gets a certificate as Sub-Overseer, while a student who passes the second year's course and examination obtains a certificate as Overseer. Students who obtain a Licentiate's certificate are, after a short probation, eligible for the grade of Assistant Engineer. In the educational chapter of the report for 1872-73, it will be found that the number of students at the Civil Engineering College has now more than doubled during the last twelve months. It may be hoped that the art and profession of Engineering will in time be popular among Bengal students.

The several branches of the Public Works Department have hitherto been able to provide employment for all, or nearly all, the students who pass the several Civil Engineering Examinations and adopt Engineering as a profession.

The Calcutta School of Art became a Government Institution in the year 1864. No examination of any kind is required of candidates for admission, and none of the pupils possess any knowledge of art before they join the school. The subjects taught are drawing, wood-engraving, lithography, plaster-casting, and decorative art of all kinds.

Among "special" schools and colleges are ranked the Sanskrit College at Calcutta and the two Mahomedan Madrissas at Calcutta and Hooghly. These two Madrissas were originally established as places for the education of Mahomedans in Arabic, Persian, and Mahomedan law. The Calcutta Madrissa was founded by Warren Hastings; the Hooghly Madrissa is attached to the Hooghly College, which is supported entirely by college fees and by the bequest of a Mahomedan named Mahomed Mohsin, who left a large landed estate for religious and charitable purposes.

Three new Madrissas are now being organised at the chief centres of Mahomedan population. A description of those institutions, and of the funds from which their cost is met, will be found in the chapter which relates to the educational events of the year under report.

Artizan schools have recently been established at Dacca, at Burdwan, at Dehree on the Soane River, and at Darjeeling, and are aided by Government. The income of the Williamson bequest, about Rs. 4,600 a year, has been allotted for artizan classes either at schools or in workshops in Assam, and for surveying and mensuration classes in the Anglo-vernacular schools in that province.

There are in Bengal three classes of normal schools, namely, higher class, lower class, and female. There are nine Government higher class, and nineteen Government lower class normal schools. The number of aided normal schools for boys is thirteen, and the number of aided female normal schools is two.

Vernacular only is taught at all normal schools; English instruction is excluded, because the object of the normal schools was to train up teachers for vernacular and primary schools, and it was feared that young men who had received a fair education and had learnt English would not be content with masterships in primary schools. The subjects taught at normal schools are arithmetic, composition, history, and geography, geometry and algebra, mathematics, surveying, natural philosophy and science, and the art of teaching. All these subjects are taught through the vernacular. Barely half of the youths who enter our normal schools go through the whole course and gain a final certificate; many pupils, however, who leave the normal schools and take masterships before they complete the full course derive much benefit from their normal school training. In the chapter relating to the current year will be found an account of the measures recently taken to establish a first class normal school in every division (Commissionership) and a lower class normal school in each district, for training primary schoolmasters. For primary schoolmasters the course will extend over one year; for a middle class teacher's certificate the course will be two years.

The aided normal schools are maintained by missionary bodies, with a view of training up teachers for their rural schools. At some of these institutions youths of aboriginal races, such as Koles, Oraons, Khasis, and Sonthals, are trained for village schoolmasterships among people of their own race and tongue. These normal schools are very economically managed, and without them successful village schools among aboriginal races would be a very difficult matter.

Missionary normal schools.

Government female normal schools were established at Calcutta and at Dacca. They were very costly, and did not succeed in attracting many pupils of a class which would make efficient schoolmistresses. It was, therefore, after very full experiment and careful consideration, decided to close these Government female normal schools, and to devote such funds as were available to aiding normal schools under a native management. In this way two considerable grants of Rs. 2,000 each per annum have already been made in aid of female normal schools in Calcutta. A grant of Rs. 3,000 a year had been promised some years ago to a female normal school in Rajshahye, to which Rs. 1,500 a year are contributed by the Rajah of Nattore of the Rajshahye district. An English schoolmistress has charge of the school, which as yet has very few pupils, and is not in a very flourishing condition. The private normal schools for women in Calcutta have not been long in existence.

Female normal schools.

Girls' schools.

The great majority of girls' schools are in the Central and Western districts of Bengal Proper, and especially in the town of Calcutta. There are a few girls' schools in the Dacca district, but over the rest of the country there are hardly any girls' schools at all. Very many of the aided girls' schools are maintained by different missionary bodies. The education imparted in most girls' schools is of the simplest possible kind. Educated Bengalees of the upper and middle classes are now beginning to educate their daughters, and to seek for educated girls as brides for their sons. But for girls of this class, home or zenana teaching seems to be preferred to girls' schools. Home teaching of girls is to some extent practised outside Calcutta, but if Calcutta and a few large towns in Bengal be excepted, nearly all the efficient girls' schools are in the hands of the missionaries. A few little girls often attend the village patshalas and sit at the gooroomahashoy's (village dominie's) just to learn a little reading and writing with their brothers; but as a general rule it may be said that outside Calcutta, Dacca, and some few other towns in Central and Western Bengal, there are no girls' schools, and there is at present no demand for the education of girls or of women.

There are eleven Government colleges in Bengal for general education, five aided colleges, and two unaided colleges. Some of these are

COLLEGES.

called "High Schools," but for purposes of classification any institution which educates boys after they have become undergraduates of the Calcutta University is here reckoned as a college. The aided colleges are all kept up by missionary societies. Some colleges are first class, teaching up to the degree of Bachelor of Arts; others are second,

teaching only up to the First Arts Examination. The following is a list of the colleges, &c., in Bengal, with the number of students according to the latest returns :—

GOVERNMENT INSTITUTIONS.		AIDED INSTITUTIONS.	
Arts Colleges and High Schools.	No. of pupils on 31st March 1873.	Arts Colleges.	No. of pupils on 31st March 1873.
<i>1st Class Colleges.</i>			
Presidency College	385	Free Church College	108
Houghly " " " "	120	General Assembly " " " "	74
Dacca " " " "	124	Cathedral Mission " " " "	74
Patna " " " "	97	St. Xavier's " " " "	31
		Lon. Miss. Soc. " " " "	18
<i>2nd Class Colleges.</i>			
Sanskrit College	26	UNAIDED INSTITUTIONS.	
Krishnaghur " " " "	62	The Martiniers, Calcutta.	
Berhampore " " " "	24	Serampore College.	
<i>High Schools.</i>			
Cuttack High School	14		
Midnapore " " " "	12		
Gowhaty " " " "	4		
Rampore Beaulah* " " " "	...		

At each first class college there are four professors, besides professors of special subjects ; at the second class colleges there are two professors.

The tuition fee payable at colleges is Rs. 12 a month at the Presidency College, and Rs 5 at colleges in the interior of Bengal. The policy of Government during the last two years has been to increase considerably the staff of professors and teachers competent to give instruction in natural and physical science, and to promote, by special scholarships, the study of these branches of learning. Already these measures are bearing fruit in a large increase to the number of students electing for the science course at the University Examinations.

Of the schools spread all over the country, the higher class English schools are those which educate up to the standard of the University Entrance Examination. They are attended for the most part by the sons of comparatively well-to-do people, who can afford to pay monthly fees ranging from Re. 1 to Rs. 2-8 per month, and reaching even to Rs. 4 or 5 in some of the Calcutta schools. Most of the boys at these higher schools intend, if their parents can afford it, to prosecute their English studies until they become fit for Government employment, for the Medical College, or for the profession of advocate, pleader, or law agent. English, the Vernacular, and one of the older oriental languages, usually Sanskrit, are taught at all the higher schools. There is one Government school of this class at the head-quarters of each district, and one attached to every college.

Among "middle schools" are ranked all the English schools which do not train up to the University

MIDDLE SCHOOLS.

Entrance standard, and a certain number of vernacular schools which teach more subjects than are included in the primary school course. The "middle schools" include all, or nearly all, the Anglo-vernacular schools established and managed by native committees. In about one-third of these Government middle schools English as well as the vernacular is taught. Of all schools in Bengal these middle schools receive most support from the people themselves. The great majority of the middle schools are in the Western, Central, and Eastern districts.

The Government of Bengal first directed its attention to primary education eleven or twelve years ago, and a system was begun of instituting

Primary instruction.

or aiding village patshalas at a cost of Rs. 15 for each patshala. A second system of what were called circle schools was also tried, whereby four patshalas were formed into one circle, over which was placed a trained teacher, whose business it was to visit and teach at each patshala in turn, and to direct the teaching of the indigenous schoolmasters. Recently, however, the scheme has been much modified and extended. A plan for systematically establishing Government primary schools into all districts, and of localizing their administration, has been framed, and a total Government grant amounting to Rs. 5,30,000 a year is now allotted for primary education.

Indigenous schools are of two kinds, namely, patshalas or ordinary village schools, where the vernacular of the district, whether it be Bengalee,

INDIGENOUS SCHOOLS.

Hindee, Ooriya, or Assamese, is taught; and muktabs or Mahomedan village schools, where the Koran is taught. In one or two Bengal districts there exist a certain number of Sanskrit schools called "tols," in each of which a few men are trained in Sanskrit and in the sacred writings of the Hindoos. In patshalas, and in a few muktabs, reading and writing the running hand of the country, elementary arithmetic, and bazaar account-keeping, are taught. The teacher of these indigenous village schools is generally a villager who knows nothing beyond reading, writing, and ciphering; but he teaches these to the school-boys well enough after the native fashion. Sometimes a village school is nothing more than a group of five or six boys, who collect for two or three hours a day at the village shop, and get a little elementary instruction from the half-educated shopkeeper. Muktabs, or Mahomedan schools, are often held in mosques or in the house of some comparatively wealthy Mahomedan villager, who can afford to keep a moulvie and to let his neighbours' sons come and learn with his children. The master of a village school gets what fees he can in money or in rice from the little boys and girls who attend his school; rich parents may pay three or four annas a month, or even more: but an ordinary village school-master probably does not earn more than Rs. 5 a month. The number of boys attending a village school varies of course with the size of the village: in a small village the patshala may contain 10 or 12 boys and girls, while in large towns indigenous patshalas of the same type

may have about 50 or 60 boys on their rolls. The attendance at patshalas is not very regular, but still the boys at these village schools do undoubtedly acquire enough knowledge of reading, writing, and arithmetic to be very useful to them in the ordinary affairs of their lives. Perhaps 15 to 20 boys would be a full average attendance for indigenous village schools all over the country.

SCHOLARSHIPS.

Revised scholarship rules have recently been issued, whereby—

410 primary school scholarships of Rs. 3 a month, tenable for two years, are allotted to the several districts of Bengal;

Rs. 60,000 have been distributed to the different districts, to be devoted, as the District Committees may decide, to constituting either minor scholarships of Rs. 5 a month, tenable for two years for English schools, or vernacular scholarships of Rs. 4 a month, tenable for four years, for vernacular schools;

160 junior scholarships are allotted to the several divisions (Commissionerships);

50 senior scholarships are allotted to the several divisions and districts which contain colleges.

For the encouragement of physical and practical science it has been provided that papers in physical geography, botany, physical science and surveying, should be set at the vernacular and minor scholarship examinations; that not less than one-half the junior scholarships of each district must be held by boys who had qualified at a previous examination in physical geography, drawing, and surveying; and that not less than half the senior scholarship-holders must choose the alternative science course instead of the arts course laid down by the University for candidates for the degree of B.A.

The total cost of all these scholarships is—

	Rs.
Primary scholarships ..	29,520
Minor and vernacular scholarships ..	60,000
Junior scholarships	46,800
Senior do.	25,200
Total ..	<u>1,61,520</u>

Hitherto there had been no scholarships for the lowest class of schools. Scholarships have now been assigned to encourage the primary schools and to enable a few selected boys to prosecute their studies in schools of the next higher grade or middle class schools. The minor and vernacular scholarships are tenable for two or four years. Two years have been allowed for boys who have received an English education and take the scholarships to qualify for the Entrance standard, while for boys coming from purely vernacular schools four years are allowed. For the higher schools the junior college scholarships are given in large numbers. These are tenable for two years, and enable clever youths from the schools established in every part of the country to follow the various courses in literature, science, art, and

special Civil Service subjects or to the First Arts examination, or to corresponding standard in other subjects. Finally, for the successful students up to this latter point, the senior scholarships provide the means of prosecuting higher studies for two years more, and attaining the highest acquirements and degrees. There are also a number of special scholarships for students of medicine, engineering, art, Sanskrit, and Arabic, and a few privately-endowed scholarships.

Much attention has recently been paid to physical science and physical teaching in Bengal. The

Scientific and technical teaching.

present Lieutenant-Governor is con-

vinced that there is too much instruction in languages and too little teaching of practical arts and sciences imparted under the old educational system, and in this view has effected arrangements under which what is called technical education has been to a considerable extent carried out. It was felt that the study of literature and mental philosophy at our schools and colleges had, if anything, been overdone, and that it was absolutely necessary to provide for the rising generation of students some training in more practical subjects. In these provinces, for instance, where so large a proportion of the population is directly interested in land or agriculture, it was obvious that the urgent need of men duly qualified in land surveying, both for the public service and their own private work, should not be allowed to remain unsatisfied. The study of physical geography—comprehending in this term an elementary and popular knowledge of the globe and of the things that grow or creatures that live upon it, such as is now taught under this designation in many European schools—was also completely non-existent, and the Lieutenant-Governor has thought it very desirable to introduce physical geography in this wide sense into our schools generally, as a first instalment of popular science.

At the same time the University has recently adopted an alternative course of study, which to a certain extent substitutes physical geography, applied mathematics, chemistry, and natural science, for classical languages, mental philosophy, and the higher branches of pure mathematics, and it was desirable that Government should keep up with the University measures and provide facilities for learning the course which might be laid down for the subjects of physical and practical science.

Under these circumstances Sir George Campbell has succeeded in securing from England, through the Secretary of State, the services of two accomplished Professors, the one a professor of vegetable physiology and botany, and the other of agricultural chemistry, and these gentlemen have entered on their duties in the Educational Department during the course of the past year. Teachers of chemistry and other sciences have been supplied to several of the colleges. Arrangements have also been completed for attaching teachers of drawing, physical geography, and the use of engineering materials, and surveying, to many of the principal Government schools which had previously confined themselves to a course of training principally linguistic. Special rewards have been offered to induce masters at district schools to qualify as survey and science teachers.

The liberality of His Highness the Maharajah of Vizianagram has placed at the disposal of the Government of Bengal the sum of Rs. 1,800 Scientific and technical scholarships. a year to be spent on scholarships for the encouragement of physical or practical science, and this grant has, with the Maharajah's consent, been devoted to the establishment of ten annual scholarships of Rs. 7-8 a month each for proficiency in physical science or surveying. The measures that have been adopted to encourage practical science by making it a necessary subject at the different scholarship examinations have already been described.

In the body of the present annual report it is explained that annual examinations have been instituted at which young men of education may prove their fitness for executive and other appointments in the native civil service. The regular preliminary course of instruction which is now insisted on and comes into force with the new year is also described. Civil service classes have been opened at the Hooghly and Presidency, Patna and Dacca Colleges.

With a view of inducing Bengali students to cultivate their physical powers, gymnasia have been opened at several schools and colleges in Bengal, especially in the colleges which maintain a civil service class, and gymnastics, riding, and walking, are actively practised by the students with fair success. The natives of Bengal have been found to distinguish themselves especially in gymnastic exercises, and it is confidently hoped that the result of judicious encouragement in this direction will do much to remove from Bengali students the reproach of unmanliness which has sometimes been cast against them, and counteract the effect which excessive and unremitting study certainly produces. At present it may be said that a very satisfactory progress has been made in this direction.

The rules under which grants are made to private persons and bodies in aid of the schools they may establish are a very important feature in the Bengal system of education. Most of the middle schools, and a great many of the higher schools in Bengal Proper, are maintained under this system; a few colleges also, established by different Missionary bodies, are largely aided with Government funds under these rules. As yet the aided school system has not flourished in Behar, Orissa, Assam, or the outlying parts of Bengal, and the system has moreover been found practically inapplicable to the extension of primary schools.

The grant-in-aid system is worked thus: Whatever sum of money the Government can afford (at present the amount is Rs. 5,20,000 a year) is distributed to the different districts of Bengal, with reference to their population, their educational advancement, and the number of aided schools already existing within their limits. This allotment is at the disposal of the District Committee, who make it go as far as they can by making small grants to schools which come within the rules. A normal school, or a technical school, or a girls' school, may receive a special grant amounting to more than the total of its

private income; but no other school can have a grant-in-aid exceeding the amount of its private income from fees, subscriptions, and endowments. A middle school may, on its first establishment, have a grant equal to its private income; while a higher school grant may amount to two-thirds of its private income. Each grant holds good for five years, and is open to revision, reduction or withdrawal at the close of that period. Aided schools are obliged to render accounts every second month, to levy some small school fee, to permit inspection by Government officers, to pay their teachers regularly, and generally to conform to such simple rules as may from time to time be issued. Any failure to comply with the rules, or any diminution of the private income, renders an aided school liable to a reduction (temporary or permanent) of its grant. In the more advanced districts near Calcutta and Dacca, the full grant-in-aid allowed by the rules is rarely given; and on the completion of the five years for which a grant is made, it is usual to renew the Government aid at a lower rate, and thus to set free funds for the aid of new schools in the same neighbourhood. As yet (1873) schools which used to be aided can flourish without Government support only in Calcutta, Howrah, Dacca, parts of Hooghly, Kishnaghur, and such like centres of the educated population. But it is hoped that in the course of years higher and middle schools in all the more advanced districts may become independent of Government aid, that municipal funds will do what may be necessary to help new schools in the larger towns, and that the grant-in-aid allotment (which, though larger than it ever was before, is unhappily very insufficient for the great population of Bengal) may be available for promoting new schools in backward parts of the country.

The directing and inspecting agency of the Educational Department consists of a Director, six Inspectors, and a large number of Deputy Inspectors; the cost of this organization used to be about Rs. 3,00,000 per annum; but with the extension of primary schools the subordinate inspecting agency has been increased. The Inspectors of Schools and their subordinates are allowed to devote their time completely to the work of inspecting schools, while the local administration of the educational funds, the establishment of new schools, the appointment of masters, and the extension of education generally, is in the hands of District Officers and District Committees, assisted and advised by the departmental officers.

The following re-arrangement of the educational circles has recently been carried into effect:—

EDUCATIONAL CIRCLE.	Administrative division.	Head-quarter.
Western circle to coincide with ...	Burdwan and Orissa ...	Hooghly.
Presidency circle ditto ...	Presidency and Chota Nagpore ...	Calcutta.
Rajshahye circle ditto ...	Rajshahye ...	Berhampore.
East Bengal circle ditto ...	Dacca and Chittagong ...	Dacca.
Behar circle ditto ...	Patna and Bhagulpore ...	Patna.
Assam circle ditto ...	Assam and Cooh Behar ...	Gowhaty.

One Deputy Inspector is attached to each district, except the districts of Assam, including Goalparah and the Garo and Khasi Hills. Special arrangements have also been made for the Sonthal Pergunnahs, for the Chittagong Hill Tracts, for Singhbhum, and for any other wild and peculiarly situated districts. The subordinate Deputy Inspectors are posted to sub-divisions, when this can be done conveniently. A class of Sub-Deputy Inspectors, men on Rs. 30 or Rs. 40 per mensem, has been appointed to circulate among and inspect the patshalas; one such Deputy Inspector is attached to every considerable sub-division of a district.

The Deputy Inspectors of each district are under the authority of the Magistrate and Collector.

District Committees.

In each district a district school committee of residents in all parts of the district has been appointed. The Commissioner exercises a general supervision and control over the committees, and, if present, presides at the meetings of the committee. The Magistrate and Collector is Vice-President, and takes the chair when the Commissioner is not present, delegating this duty to any other member acceptable to the committee generally when he is not present himself. The Inspector of the circle is *ex-officio* a member of all committees. The Vice-President is the active head of the Committee, and carries on the duties through the Deputy Inspectors and the Secretary, subject to the resolutions of the committee. The head-master of the Government school or other educational officer selected is Secretary to the committee. The Deputy or Sub-Deputy Inspectors of sub-divisions are placed under the sub-divisional officers.

All ordinary Government schools are under the management and supervision of the committee. The

Their functions.

Government allot a certain sum for grants-in-aid to each district, distinguishing the allotment for middle and higher education and that for primary education. Grants for aided schools of the former class are made on the recommendation of the committee, the opinion of the Inspector being required in each case; while the sums devoted to primary education are allotted by the Magistrate and Collector with the advice of the committee. In regard, however, to the higher and middle schools classed as *aided*, the district committees having assigned the grants have no authority to interfere with the local committees or other managers of these schools. The inspecting officer sees that the conditions of the grants are complied with, but subject to these conditions the local management of aided schools is as unfettered as possible.

In all districts of the Bengal province, where aided schools of the higher and middle classes abound, the inspection and control of any or all such schools may, with the Commissioner's consent, be left in the hands of the Circle Inspector. The training or normal schools are under the Magistrate, acting with the advice of the committee. All colleges educating up to the B.A. standard are independent of the District Committees.

The Inspectors in the Education Department now occupy towards the local authorities much the same position that Government Inspectors of Education, Police, and other departments occupy in England.

They are the agents of the Government, to whom the Government looks to see that the local authorities fulfil the conditions on which grants are made to them; that the schoolmasters are efficient; that schools are well managed; that pupils are well taught; that the accounts are reliable and correct; that instruction is conducted in accordance with the general rules laid down; and that scholarships and rewards are fairly given.

The Director-General of Public Instruction is the medium of communication between the local and inspecting authorities and the Government, the adviser of the Government in educational matters, the condenser and compiler of statistical information, and the organ of the views of Government.

PRIMARY EDUCATION.

The primary school system recently instituted is so important that a more full account of it has been reserved and will now be given.

In past times the village school was probably one of the institutions of every large village or rural self-governing commune in Bengal.

Indigenous village schools of the past. But for many years, perhaps for centuries, this village school (or patshala as it is called) has received scanty support from the people, and none at all from the Government. Mr. Adams framed, many years ago, an estimate of the number of indigenous village schools he thought there might be in Bengal; but from Mr. Adams' time down to 1872 no attempt was made, so far as we can trace, to ascertain the number or the calibre of the indigenous schools of Bengal. At the census some 13,500 indigenous schools were returned as actually counted; for some districts the return of schools was not made, and subsequent inquiries have induced the Lieutenant-Governor

And of recent times. to believe that there are probably at least 18,000 indigenous schools in the provinces of Bengal. Primary schools under missionary organization are mostly confined to the highland and aboriginal tribes, among whom Christian Missionaries have laboured with much zeal and success.

Indigenous schools are most abundant in the secluded and, in some respects, backward province of Orissa, where there is more than one patshala to every three villages or townships; they are fairly numerous in Western and Central Bengal, but village schools are rare in Behar and Eastern Bengal, and the returns show only one school to every fifty or sixty villages in some districts. Some officers who know the country best believe that there are in Bengal many more places for teaching children than the census returns show. But so far as we have been able to effect a census of the people who could read and write in the town and suburbs of Calcutta and of tracts in the metropolitan districts, the educational destitution of the country is most lamentable. In a large tract near Calcutta only 2½ per cent. of the population could read and write.

The need for rural schools in Bengal attracted the attention of the Home authorities, and in their educational despatch of 1854 the Hon'ble Court of Directors wrote: "Very little has hitherto been done in Bengal for the education of the mass of the people * * * * *

the attention of the Government of Bengal should be seriously directed to the consideration of some plan for the encouragement of indigenous schools and for the education of the lower classes." This injunction has since been frequently repeated by the Government of India and by successive Secretaries of State.

In the Bengal Government the matter was first taken up by Lord

Patahala scheme of 1800.

Hardinge, and again it was revived by Sir John Grant's Government, and a scheme was framed for aiding existing village schools with money grants, and for bringing such schools under regular inspection and supervision.

The plans on which were prepared these village schools were good; they were to be improved village schools of the old indigenous type; they were to teach village boys to read and write and cipher; and their teachers were to be villagers who would be content to be rural schoolmasters and nothing else to their lives' end. But funds were scanty, and perhaps the Educational Department did not enter so heartily into the scheme as it did into arrangements for colleges and high schools: at any rate, while increased grants were made to higher education, the total grant for primary schools was very small. Such as it was, it was principally devoted to schools which, though so called, were not really primary, being rather middle class schools. Even after the grant of some additional funds for primary education by the present Lieutenant-Governor at the end of 1871, the so-called primary school grant was only Rs. 1,30,000 a year at the end of 1871, and the total number of Government schools called primary was only 1,900, or about one to 39,500 souls.

Limited effect given thereto.

Even these schools were very unequally distributed; about 1,600 were situate in some twelve districts of Western and Central Bengal, so that the primary school system, such as it was, had hardly been extended at all to Eastern Bengal, Assam, Behar, and Orissa.

"The consideration of providing primary education for the general body of the population" had been specially commended by Her Majesty's

Problems before the present Lieutenant-Governor.

Secretary of State to the present Lieutenant-Governor. When Sir George Campbell came to review the position, he found that the two great questions were, (1) whence should money be found for the extension of primary schools, and (2) what was the best means of effecting such extension.

Bengal alone of all the provinces of India has never been aided in any way by grants for local and municipal funds; there was no local

Ways and means.

rating for education in Bengal, and for reasons which are elsewhere explained no such rating has been possible. If the present Lieutenant-Governor was to make a beginning of primary education, it behoved him then to do so with such funds as he could make available. It so happened that the Bengal provincial funds, which had been made over to the local Government just at the time of Sir George Campbell's appointment to Bengal, had, during the first eighteen months of (what has been called) the decentralization system, been carefully husbanded. Accordingly the Lieutenant-Governor found himself able during 1872 further

to increase the grant for primary schools from Rs. 1,30,000 to Rs. 5,30,000 a year, and to find funds to pay for the additional native inspecting agency required. In the Chapter of the present year's Report on Education it will be seen that doubt hangs over the question whence the means for continuing this grant is to come. However that may be, the grant has been made and can be made for another year or two to come from the provincial funds now in hand, if they are not otherwise exhausted.

The second point to be decided was the agency by which the new primary school grant could be spent to the best advantage. An Inspector of District officers entrusted with the primary school scheme. Schools, with a circle of ten districts, containing a population of 14 millions, could hardly direct and manage the village schools of his whole circle; and moreover an Inspector could not have influence over or know the zemindars, town-folk, and villagers, without whose co-operation no effectual reforms of this kind could be carried out. It seemed best to place the administration of the primary school funds in the hands of the District and Sub-divisional Officers, who were to be aided and advised by regularly constituted district school committees. The District Officers were to improve existing village schools and establish new ones by giving either a monthly grant or a capitation allowance, and to evoke the liberality of landholders or others by giving a small Government grant to any primary school they might successfully establish. At the same time the Court of Wards, in its capacity as trustee of Ward's estates, and Government for its own estates (khas mehals), set an example to other landholders by devoting a small annual sum for the support of village schools.

In regard to the style of schools and the teaching to be given, it was explained that the object was "that the money should be used to encourage and develop in rural villages proper indigenous education, that is, reading and arithmetic in the real indigenous language and character of each province." It was said that it would not be "necessary to employ highly trained masters on considerable salaries," but that it would be preferable "to give the money as a grant-in-aid to men of the purely indigenous schoolmaster class; provided each keeps up in a place where it is required, and among a population of cultivators and labourers, a school efficient according to native standards, and submits it to inspection and examination." It was expected that in ordinary cases a Government grant of Rs. 2 or Rs. 3 a month to each village school would suffice, inasmuch as the total earnings of a Bengalee village schoolmaster rarely exceed from Rs. 5 to Rs. 8 a month. Much discretion was left to District Officers, acting with the advice of their committees, in carrying out these orders. They were asked to "ascertain what indigenous means of indigenous education existed; to enlist the people and their leading men as much as possible in favour of simple education, and to develop by small grants according to the circumstances of each case." It was enjoined that in Mahomedan districts a fair share of village schoolmasterships should be given to Mahomedans if they proved competent.

When the duty of extending and promoting primary education was thus made over to district officers who already hold in their hands so many other threads of district administration, it became necessary to allow each district chief a special agency to help him in his educational duties. There had previously been in Bengal a certain number of Deputy Inspectors of Schools, who were native gentlemen of some education, and whose duty was to inspect aided schools and patshalas. These Deputy Inspectors were on salaries ranging from Rs. 80 to Rs. 200 a month, and the majority of them were attached to the twelve head-quarter districts wherein the old school scheme had been carried. The circles within which Inspectors and Deputy Inspectors had worked did not correspond to the administrative divisions and districts; and the first step was to make educational jurisdictions coterminous with Commissionerships and districts. Next it was arranged that to the head-quarters of each district should be attached a well-paid Deputy Inspector, who would be quite competent to inspect middle-class schools as well as patshalas, and who would be the right hand of the district officer and of the district committee in educational matters. Seeing how very large most Bengal districts are, the Lieutenant-Governor attached a Sub-Inspector to each sub-division of a district, whose function would be to administer the educational funds and to inspect the primary schools of the sub-division under the direction of the Sub-divisional Officer. To all classes of inspecting officers is granted a sufficient travelling allowance to cover the expenses of their inspection journeys. There has thus been organised a subordinate inspecting agency consisting of about 50 Deputy Inspectors and about 120 Sub-Inspectors, who will cost (for salaries and travelling allowance) about Rs. 1,60,000 a year. Out of this sum at least Rs. 1,00,000 may be taken to be the cost of inspecting and directing primary schools.

Then again, though there was a large class of indigenous schoolmasters, yet their modes of teaching were primitive and possibly in some respects clumsy; and our object is not only to extend, but also to improve, the primary schools of the country. To do this it was necessary to give some training to the younger men of the present schoolmaster class, and to organise some training for the village schoolmasters of the future. There were previously in Bengal four expensive normal schools costing about Rs. 15,000 a year a-piece; and there were also twenty-three less expensive normal schools costing about Rs. 4,000 a-piece.

On the recommendation of the Director it was decided that vernacular only should be taught at normal schools, and that there should be a high class normal school, costing on the average Rs. 6,500 a year, at the head-quarters of each Commissionership, and a second class normal school, costing about Rs. 3,000 a year, at the head-quarters of each large district, and a third class normal school, costing Rs. 2,000 a year, at the head-quarters of each small district. The first class normal schools were to train teachers for middle vernacular as well as for primary schools; the second and third class schools were to train teachers for primary schools only. Nearly half the cost of these

normal schools is on account of the stipends which will have to be allowed to the teachers, or embryo teachers, who may be under training. The total cost of the normal schools, being 46 for all Bengal exclusive of the petty hill districts, will be about Rs. 1,65,000 a year, or very nearly the same sum that used in former years to be spent on 27 normal schools. Of this sum about Rs. 1,30,000 will be spent on preparing masters for village schools only, and may be considered as part of the expenditure on primary education.

Government scholarships were in former years given to boys who did well at the University examinations, and at minor examinations held by the educational department in each district. No scholarships were set aside for boys at primary schools (patshalas), and it rarely happened that a patshala boy could gain a scholarship and so secure the means of prosecuting his studies beyond the course of a petty village school. By the orders of 1872 a sum of Rs. 29,520 have been granted annually to provide 410 patshala scholarships of Rs. 3 a month, tenable for two years, at any middle class English or Vernacular school. A certain number of these scholarships have been allotted to each district, in proportion to the number of its primary schools. During the past year competition for these scholarships has been very keen; and as the primary school scheme is developed, a larger share of the scholarship grant will have to be allotted to patshala scholarships.

The whole system of scholarships is now so arranged, that a specially gifted and deserving boy may by this means be lifted from one grade of schools to another till he reaches the highest place of education and is there educated at the public expense.

The total funds now allotted to primary education in Bengal are thus—

	Rs.
Grants for patshalas to each district	5,30,000
Cost of inspecting and supervising primary schools	1,00,000
Cost of normal schools for training primary schoolmasters	1,30,000
Grant for patshala scholarships	29,520
Total ...	7,89,520

or considerably more than one-third of the net* grant for education in Bengal for the year 1873-74. This expenditure is no doubt exceedingly small for the primary schools of so great and populous a country, but it is an advance on what went before, and a beginning has been made.

The primary education scheme sketched above only came into full operation in 1872-73; but the district officers and committees, one and all, took the matter up most heartily and energetically. By the 15th

* *Note.*—The gross grant for education in Bengal for the year is Rs. 26,80,400, and the receipts from fees, &c., are Rs. 3,98,500.

August 1873, the latest date for which returns are available, 10,787 village schools, old and new, had been brought within the operation of the Government scheme, and at these schools there were 255,728 scholars. 2,950 of the schools, principally in the Orissa, Midnapore, 24-Pergunnahs, Dinagepore, Rungpore, and Bhaugulpore districts, receive a capitation grant. The remainder receive a monthly grant-in-aid ranging from Rs. 5 to Re. 1-8 per school per month, the average grant being a little over thirty-six rupees for each school per annum. In some districts the whole of the primary school grant had not been spent when the last returns were received, and further village schools were still to be opened. It is believed, however, that they are now rapidly approaching the full number. It will be seen from the Chapter on Education in the annual Report that the primary school scheme of 1872 has in the main been extremely popular, and has taken root among the people in a remarkably short space of time.

FRONTIER RELATIONS AND FEUDATORY ESTATES.

THE largest and most important of the Native States bordering on Bengal is Nepal, whose territory subtends the divisions of Patna and Bhaugulpore. Political relations with Nepal are under the direct control of the Government of India in the Foreign Department, and the only questions that arise between it and the Government of Bengal are matters of extradition and boundary.

To the east of Nepal lies Sikkim, a small Himalayan State in subsidiary alliance with the British Government, with which communication is kept up through the Deputy Commissioner of Darjeeling. An annual payment, recently raised to Rs. 12,000, is made to the Sikkimputi or Lord of Sikkim, in consideration of the Raja's position as former ruler of the hill territory of Darjeeling and a submontane tract on the plains, called the Morung. Through Sikkim lie the most promising routes for trade with Lhasa and other parts of Thibet. At present, however, the Thibetan passes are closed to ordinary British subjects though an active trade is maintained in certain articles by Bootoas and Thibetans.

Bordering on Sikkim, and bounding the division of Cooh Behar and the Kamroop district of Assam, lies Bhútan, a large independent State with which we have had intercourse from a very early period of our rule in India. Its territory occupies the whole of the Himalayan ranges between Bengal and Thibet for some four degrees of longitude. Repeated outrages on our subjects by the hillmen led from time to time to punitive measures on our part, chiefly consisting in the annexation, temporarily or permanently, of the various dwárs or submontane tracts with the passes leading into the hills. The rude reception given to the embassy of the Hon'ble A. Eden in 1863 led to war and the ultimate confiscation of the whole of the dwárs. As, however, the Bhútaneses depended mainly upon these for their revenue, it was arranged to allow them annually a subsidy of Rs. 50,000 during good behaviour. This gives us an effectual control over them, while the occupation of two strong positions at Buxa and Dewangiri within their frontier serves also as material guarantee against future aggression. The following represents in tabular form the principal facts regarding our relations with Sikkim and Bhútan.

NATIVE STATES OF SIKKIM AND BHUTAN.

NAME OF STATE.	In subsidiary alliance or feudatory.	Tribute in men or money.	Date of treaty, with authority.	Population.	Supposed gross revenue.	Military force.	Transit duties or not.	Principal articles of production, including manufactures and mines.
Sikkim ...	Subsidiary alliance. We pay the Raja Rs. 12,000 annually. compensation for lands, &c.	None	10th March 1817. Aitchison, Vol. I, p. 137.	Said to be 7,000, probably more.	Rs. 7,000 per annum, besides what we give.	None	Transit duties so far are taken that goods have to pay (but not passing over) rivers spanned by bridges.	Rice, Indian-corn, millet, oranges, tea, and two or three sorts of Lepcha cloth. <i>Mineral Productions.</i> Lime and copper.
Bhutan ...	Independent. We pay Rs. 50,000 per annum. compensation for territory annexed.	None	25th April 1774. Aitchison, Vol. I, p. 143. And 11th November 1815.	Hon'ble Ashley Eden estimated it at 20,000. It is probably much more.	Not known ...	Estimated by Hon'ble A. Eden at about 6,000.	Same as above.	Rice, Indian-corn, millet, and two sorts of cloth. Musk, ponies, chowries, and silk, are the chief articles of trade.—Eden's Report, page 95.

East of Bhútan the Sub-Himalayan ranges are occupied by various tribes of hillmen, with whom the civil officers of Durrung and Luckimpore are in pretty constant communication. In the times of the Assam Rajahs most of these tribes had acquired a right to levy from the villages on the plains certain petty dues, the collection of which led to frequent quarrels and outrages, and it has for many years been the policy of the Government to commute the claim to collection of this *posa*, or blackmail, for money payments, which are made to the chiefs by Government, only so long as they conduct themselves peaceably.

The first of these tribes on the confines of Bhútan proper is a clan of Bhúteas dependent upon Towang and tributary to Thibet. They have no connection with the Bhútan Government. A considerable trade between Assam and Lhassa is carried on through them. They receive an annual payment of Rs. 5,000 in lieu of *posa* formerly collected by them in the Kurriapara Dwár. They are generally quiet and friendly.

Eastward of these are the Bhúteas of Rooprai Ganw and Sher Ganw, who are independent of Thibet, known as the Chár-Dwár Bhúteas. They used to draw *posa* from the Chár Dwárs of Durrung, and now receive Rs. 1,710 annually as compensation for its stoppage. Beyond these are the Thebengea Bhúteas, a small clan, who in like manner draw Rs. 145-13 from our treasury. These also are not troublesome as a rule.

Eastward of these again, and to the west of the Bhoroli River, are the Akas or Hrusso, a clan which at one time gave considerable trouble by their raids upon the plains. They are at present, however, peaceable, and draw annually Rs. 668 in lieu of *posa*. Their language shows them to be cognate to the Garos and Koches.

Eastward of the Bhoroli, as far as the upper courses of the Sundri, in North Luckimpore, are the numerous cognate tribes of Dufflas. The constitution of the Dufflas is very democratic, and every little village is independent of its neighbours. The extent of the sub-division may be gathered from the fact that there are 238 petty headmen who draw between them compensation for *posa* amounting only to Rs. 2,543. The Dufflas have generally been pretty well behaved, but the connection between the hillmen and certain colonies of the tribe on the plains leads now and then to quarrels and outrages calling for repression and punishment. A serious affair of the kind has occurred, and we are now at war with them.

Of apparently similar stock to the Dufflas are the Abors and Miris, their neighbours to the east. The Abors generally occupy the inner hills, while the Miris not only keep more to the skirts of the plains, but even occupy villages well within our settled tracts. They are the go-betweens and interpreters of the Abors in their intercourse and trade with Assam. The Abors are a dangerous and sulky race, over whom we have at present little hold. They have committed frequent raids

and been the cause of more than one frontier expedition. Since 1862, however, they have observed fairly agreements then made, by which they receive annually certain small presents of cloth, hoes, and other articles, and keep the peace along their own border.

The hills which close the north-east corner of the Assam valley are occupied by various tribes of Mishmis, who are on the one side in communication with Assam and on the other with the Chinese province of Batang. Their habitat is from 96° to $97^{\circ} 30'$ east longitude and from $27^{\circ} 40'$ to $28^{\circ} 40'$ north latitude. The Tain, Mezho, and Maro clans have not been as a rule troublesome, and come down pretty freely to our bazars. But the Chulkattas, or crop-haired sept have raided repeatedly, and till last year were forbidden to pass the frontier posts.

The tract of country near Sadya, north of the Brahmaputra, and south of it also to a certain small extent, is colonised largely by Khamptis, a race of Shan descent, professing the Buddhist religion. These were immigrants from Borkhampti, and in the later days of the Ahom Government had considerable power in and about Sadya. In 1839 they rose against the British officers and surprised the post of Sadya. Since the punishment thereafter inflicted on them they have had little political importance. They are peaceable subjects, though they defend their own villages very successfully against Mishmi incursions. They are a civilised and educated people, with a language and literature of their own.

The principal tribe in the Sadya sub-division south of the Brahmaputra is that of the Singphos, supposed to be identical with the Kakus or Kakhyens of Burma, whose chief habitat was on the great eastern branch of the Irrawaddy. In the early days of the British occupation the Singphos gave much trouble, and, aided by the Burmese, assumed at times a very threatening strength. They held large numbers of Assamese slaves, whose release by our forces caused them temporarily much loss. They have for many years past been loyal and quiet. We collect no revenue from them, but they submit to our political control.

In the hills to the south of the Singpho country, and thence westward as far as the Khasi Hills, are found the many tribes known to us generically by the name of Naga, who are distributed over the mountain system that lies between Upper Assam and Burmah. Of great portion of these tribes but little is known. The Nagas of the Patkoi, on the south frontier of Luckimpore, are inoffensive and numerically weak. On the frontier of Sibsagor we come to a collection of clans over whom our officers had at one time considerable influence, which has unfortunately of late years been allowed to be weakened and which we are now seeking to regain. These Nagas trade freely with the plains. Of the tribes behind these to the south we at present know little. To their west is the Naga Hills district, where, since 1866, an officer has been stationed in political charge of the tribes between Manipore and Assam, and whose presence in the hills has put an end to the raids of the Angami Nagas, which had long been the terror of Nowgong and North Cachar. It is by exploration from the Naga Hills district as a base that

we hope to learn more of the tribes between Sibsagor and Burmah. Attached to the Naga Hills district on the south-east are the Kookie colonies of North Cachar to be noticed again presently.

Between the Kolliani and Dhunsiri rivers, on the borders of Nowgong, are the Kengma Nagas, a small and inoffensive clan fast merging into ordinary peasantry.

The Garos inhabiting the extreme west of the mountain system on the south of the Assam valley were

Garos.

for long years a source of danger and annoyance to the plains of Goalpara and Mymensing. Mr. David Scott, the first Commissioner of Assam, made great efforts to conciliate and reclaim them with apparently some success. But after his day they seem to have been left very much to themselves. They carried on a considerable trade in cotton with the plains; and might perhaps, had they been left alone, have settled down peaceably enough. Unfortunately, however, the encroachments of the neighbouring Bengali zemindars proved a constant source of irritation, and raids were of frequent occurrence. In 1866 an officer, Lieutenant Williamson, was posted in the hills, who succeeded in bringing many villages into voluntary subjection. The growth of his influence alarmed the communities in the heart of the hills who know least of us; and, as they assumed an offensive attitude, it became necessary to coerce them. This was very successfully done by a police expedition last year, and the Garo Hills have since settled down quietly under the Deputy Commissioner's rule, and become in all respects a British district. Our relations with them have now ceased to be political.

To the east of Cachar lies the native state of Manipore, which is under the direct political control of the Government of India, and is therefore not dealt with in this report.

Manipore.

The hills to the south and west of Manipore, and much of the great belt of highland and forest lying

Kookies.

between South Cachar and Chittagong and Burmah, are inhabited by tribes known to us by the generic name of Kookie. This appellation, as that of Naga further north, covered a great number of different clans, often hostile to each other. The tribes between Cachar and Manipore are known as Koupooes, mostly subject to Manipore. North of these, on the high range that skirts the valley of Manipore and the Barak as far as the Angami Nagas, are the Quoireings, who trade both with the Nagas and our district of Cachar. South of the Koupooes used to be the Khongjais or Kookies *par excellence*, divided into Thados, Tlangums and so on; and south of them lay other tribes better armed than they, who have within quite recent years gradually ejected or absorbed them and taken their place. Large colonies of Kookies have under this pressure settled in Cachar and in the hills to its north. The Kookie tribe which now occupies the

Lushais.

tract south of Cachar is known to us as 'Lushais,' and has given much trouble both on the side of Cachar and of Chittagong, and been the cause of several military expeditions of which the Administration Reports contain accounts. On the Cachar side the clans may be roughly divided

into Western and Eastern Lushais. The principal chief of the former branch is Sukpila, whose name has frequently appeared in these reports. This chief was visited a few years ago by the Deputy Commissioner of Cachar, and was supposed to have seen it to be his interest to be friendly with us. He has done nothing overt since then to call for notice, but some officers stand in doubt of him, and he is withdrawing his villages more towards the Chittagong side. The left column of the military expedition of 1871-72 was directed against the Eastern Lushais. On the side of Chittagong the Lushai tribes are those of the Syloos (broken up by the other column of the same expedition); the Howlongs; and the clan of Rutton Poca, now for some years our faithful ally. The Syloos have, since the expedition, been in constant friendly intercourse with our frontier officers. We gave them advances of rice and money to obviate the suffering caused by the loss of their crops, and they received and supported a guard at one of their principal villages. The Howlongs are less intimate with us, but it is hoped that in this respect matters will improve.

Still proceeding southward, we have in the south of the Chittagong

Shindoos.

Hill Tracts the Shindoos and other tribes of the highlands between Chittagong and Burmah. Of these, however, we know little, save that they are different from the Kookies, that they raid occasionally in the Sungoo valley, and that their villages are practically inaccessible from Chittagong, though more open it is believed to the side of Arracan. From the Arracan authorities we learn that they are very numerous, apparently of Indo-Chinese race, though their dialects vary so much that Burmese has become their *lingua franca*. They live in a state of constant warfare. The Shindoos are especially powerful and much feared. They live on the Upper Koladyne, and neither pay tribute nor own the authority of any British officer. In their predatory expeditions several villages and clans are said to join together. Attempts are being made to reach and influence this people from the Arracan Hill Tracts, and of late years raids have certainly been less frequent.

Leaving now these races and countries, with whom our relations are, or have been, chiefly political, we come to those which are more under direct control, and who are tributary or feudatory to the British Government.

Going from east to west, the first of those, lying between the Nagas and Garos, are the Khasi confederacies—a collection of small States

Khasi States.

of democratic constitution, whose rulers are generally elected for life by the votes of the tribesmen, but subject to the recognition of the Government. Five of these States are classed as semi-independent, as having always been on friendly terms with us, or never having been actually coerced by British troops. The remaining twenty are styled dependent. But, in fact, all the States are much on the same footing and manage their own internal affairs, only heinous offences being dealt with by the Deputy Commissioner. Between the Khasi Hills and Sylhet, on the south, is the hill territory of Jynteah, given up by the Rajah in 1834, when deprived of his lands on the plains as a punishment for persisting in human sacrifice. This is divided into 19 petty districts, 15 of

which are each under a Dolloi, or headman elected by the people, the other 4 being managed by 13 hereditary sirdars.

The following table gives the particulars of the Khasi States :—

I.—NATIVE AND TRIBUTARY STATES—(SMALL)

NAME OF STATE.	In subsidiary alliance, or feudatory.	Tribute in men or money.	Population.	Supposed gross revenue.
				Rs. A. P.
Bhowal	Subsidiary alliance.	None ...	360	Market dues 10 0 0 Malikana on lime quarries ... 16,000 0 0 Gross revenue ... 16,010 0 0
Cherra	Ditto	Ditto ...	8,000	Market dues 7,000 0 0 Judicial fines 150 0 0 Malikana on lime quarries ... 200 0 0 Zemindari holdings in Sylhet 1,900 0 0 Gross revenue ... 8,650 0 0
Chella	Ditto	Ditto	5,511	Market dues 300 0 0 Judicial fines 400 0 0 Gross revenue ... 700 0 0
Khyrum	Ditto	Ditto ..	20,704	Pension allowed by Government, Rs. 150 per mensem 1,800 0 0 Market dues 5,000 0 0 Judicial fines 400 0 0 Malikana on lime quarries ... 1,800 0 0 Rent of coal mines 20 0 0 Contributions levied for State purposes 1,000 0 0 Gross revenue ... 10,120 0 0
Myllem	Ditto	Ditto ..	12,266	Market dues 250 0 0 Contributions levied for State purposes 1,200 0 0 Judicial fines 225 0 0 Forest rent 15 0 0 Gross revenue ... 1,690 0 0
Langram	Ditto	Ditto ...	1,867	Market dues 150 0 0 Malikana on lime quarries ... 700 0 0 Rent of coal mine 70 0 0 Forest rent 80 0 0 Fisheries 50 0 0 Gross revenue ... 1,030 0 0
Upper Maharam	Ditto	Ditto ...	6,157	Malikana on lime quarries ... 100 0 0 Judicial fines 75 0 0 Contributions levied for State purposes 400 0 0 Forest rent 15 0 0 Gross revenue ... 500 0 0

PROTECTED DEMOCRACIES IN THE KILASI HILLS).

Military force.	Transit duties or not.	Principal articles of production, including manufacture and mines.		
		Products.	Manufacture.	Mineral.
None	None	Rice Millet. Bay leaves. Black-pepper.	None	Lime.
Ditto	Ditto	Cotton Millet. Betel-nut. Betel. Oranges. Black-pepper. Chillies. Turmeric. Ginger. Honey. Oranges... .. Betel-nut. Pine-apples.	Bamboo mats Bamboo baskets	Lime. Iron. Coal.
Ditto	Ditto	Rice Cotton... .. Millet. Betel-nut. Pine-apples.	Bamboo mats Bamboo baskets.	Lime. Coal.
Ditto	Ditto	Rice Cotton... .. Millet. Job's tears. Caoutchouc. Cinnamon. Solphlang (a kind of esculent turnip). Betel-nut. Indian-corn. Betel. Oranges. Lac. Potatoes. Black-pepper. Chillies. Turmeric. Ginger. Honey. Rice Potatoes. Job's tears. Indian-corn. Solphlang (a kind of esculent turnip). Cinnamon. Caoutchouc. Sugarcane. Ginger. Millet. Rice Millet. Chillies. Turmeric. Ginger.	Cotton cloths Kriah. Silk cloth. Dhaos. Kodahes. Knives. Hammers. Crowbars. Wedges. Chisels. Bamboo baskets. Cane baskets. Bamboo mats.	Lime. Coal. Iron.
Ditto	Ditto	Rice Potatoes. Job's tears. Indian-corn. Solphlang (a kind of esculent turnip). Cinnamon. Caoutchouc. Sugarcane. Ginger. Millet. Rice Potatoes. Job's tears. Indian-corn. Solphlang (a kind of esculent turnip). Cinnamon. Caoutchouc. Sugarcane. Ginger. Millet. Rice Potatoes. Job's tears. Indian-corn. Solphlang (a kind of esculent turnip). Cinnamon. Caoutchouc. Sugarcane. Ginger. Millet.	Dhaos Baskets.	Iron.
Ditto	Ditto	Rice Millet. Chillies. Turmeric. Ginger.	None	Lime. Coal.
Ditto	Ditto	Rice Job's tears. Indian-corn. Black-pepper. Chillies. Bay leaves. Honey. Cinnamon.	Dhaos Kodahes. Hammers.	Lime. Iron.

NATIVE AND TRIBUTARY STATES—(SMALL)

NAME OF STATE.	In subsidiary alliance, or feudatory.	Tribute in men or money.	Population.	Supposed gross revenue.
Lower Mahram	Subsidiary alliance.	None ...	6,157	Market dues 120 0 0 Forest rent 40 0 0 Mahkama on lime quarries ... 250 0 0 Judicial fines 40 0 0 Gross revenue ... 450 0 0
Masbanram	Ditto ...	Ditto ...	917	Market dues 180 0 0 Contributions* levied for State purposes 150 0 0 Gross revenue ... 330 0 0
Maoyang	Ditto ...	Ditto ...	1,238	Lime quarries 252 8 0 House-tax 9 0 0 Rent of fisheries 50 0 0 Judicial fines 100 0 0 Contributions levied for State purposes 90 0 0 Gross revenue ... 501 8 0
Malai Chamut	Ditto ...	Ditto ...	299	Market dues 50 0 0 Mahkama on lime quarries ... 750 0 0 Contributions levied for State purposes 50 0 0 Forest revenue 50 0 0 Gross revenue .. 900 0 0
Marrian	Ditto ...	Ditto ...	2,306	Market dues 25 0 0 Contributions levied for State purposes 100 0 0 Gross revenue ... 125 0 0
Nobesopool,	Ditto ...	Ditto ...	961	Market dues 100 0 0 Judicial fines 80 0 0 Gross revenue ... 180 0 0
Nongkhlaui	Ditto ...	Ditto ...	6,024	Market dues 600 0 0 Contributions levied for State purposes 800 0 0 Judicial fines 50 0 0 Forest dues 600 0 0 Rent of State lands 10 0 0 Gross revenue ... 2,060 0 0
Nongspoong	Ditto ...	Ditto ...	871	Commission as mouzahdar in Kamroop district 100 0 0 Gross revenue ... 100 0 0

* These contributions are

PROTECTED DEMOCRACIES IN THE KHASI HILLS).

Military force.	Transit duties or not.	Principal articles of production, including manufacture and mines.		
		Products.	Manufacture.	Mineral.
None	None	Rice Potatoes. Millet. Indian-corn. Sohphlang (a kind of esculent turnip). Cinnamon. Caoutchouc. Sugarcane. Ginger.	None	Lime. Iron.
Ditto	Ditto	Potatoes Millet. Chillies. Turmeric. Honey. Ginger.	Ditto	Lime. Coal. Iron.
Ditto	Ditto	Honey Bees' wax. Cotton. Rice. Millet. Job's tears. Sohphlang (a kind of esculent turnip).	Mats	Lime.
Ditto	Ditto	Rice Millet. Job's tears. Ginger. Chillies. Turmeric. Bay leaves. Betel leaves. Oranges.	None	Lime.
Ditto	Ditto	Rice Millet. Job's tears. Ginger. Chillies. Turmeric. Sohphlang (a kind of esculent turnip). Indian-corn. Sugarcane.	Ditto	None
Ditto	Ditto	Rice Job's tears. Indian-corn. Sohphlang (a kind of esculent turnip).	Ditto	Ditto.
Ditto	Ditto	Potatoes Potatoes Rice. Millet. Job's tears. Indian-corn. Sohphlang (a kind of esculent turnip). Caoutchouc. Cinnamon.	Cotton cloths Kodulies. Dhaos. Crowbars.	Lime.
Ditto	Ditto	Rice Potatoes. Honey. Bees' wax.	Dhaos	Iron.

of an uncertain nature.

NATIVE AND TRIBUTARY STATES—(SMALL)

NAME OF STATE.	In subsidiary alliance, or feudatory.	Tribute in men or money.	Population.	Supposed gross revenue.
Nongstein	In subsidiary alliance.	None ...	7,765	Market dues 1,000 0 0 Lime quarries 900 0 0 Contributions levied for State purposes 1,500 0 0 Judicial fines 2,000 0 0 Elephant hunting on his own account 6,000 0 0 Gross revenue ... 10,400 0 0
Ranirai	Ditto	Ditto ...	1,737	Market dues 40 0 0 Judicial fines 150 0 0 Forest rent 250 0 0 Gross revenue ... 440 0 0
Jeerang	Ditto	Ditto ...	581	Malikana on forest ... 1,630 0 0 Gross revenue ... 1,630 0 0
Dewara Nongtyrmen ...	Ditto	Ditto ...	378	Malikana on lime quarries ... 252 0 0 Rent of lime quarries ... 50 0 0 Fees for cutting timber ... 35 0 0 Gross revenue ... 337 0 0
Maodou	Ditto	Ditto ...	253	None

PROTECTED DEMOCRACIES IN THE KHASI HILLS).

Military force.	Transit duties or not.	Principal articles of production, including manufacture and mines.		
		Products.	Manufacture.	Mineral.
None	None	Lac Honey. Bees' wax. Cotton. Cnouthone. Bay leaves. Betel. Rice. Millet. Job's tears. Sugarcane. Chillies Solpklang (a kind of esculent turnip).	Earthenware Pottery. Cotton cloths. Dhaos. Spades.	Lime. Coal.
Ditto	Ditto	Rice Job's tears. Ginger. Chillies. Millet. Indian-corn.	Cotton cloths	None.
Ditto	Ditto	Rice Millet. Ginger. Chillies. Job's tears. Cotton Cnouthone.	Ditto	Ditto.
Ditto	Ditto	Rice Millet. Oranges. Betel-nuts. Betel leaves. Turnerie. Millet	Small nets	Lime.
Ditto	Ditto	Oranges. Betel-nuts. Jack-fruit. Pineapples. Chillies. Bay leaves.	None	Lime. Coal.

Between the Lushai tract and the British district of Tipperah on the west, lies the hill territory of the Tipperah Rajah. This State is under no specific engagement to us, though its Rajah is a British zemindar, deriving the greater portion of his income from landed property in the adjoining regulation district of Tipperah. The succession to the chiefship has several times been decided by the result of suits for the zemindary in the Privy Council, and it has now been ruled by Government that the Rajah should pay a succession duty to the paramount power. The State itself is now surrounded by tracts under our control. A political agent has been appointed there, and it is now practically a feudatory State.

The following particulars are given in the statements:—

NATIVE STATE OF HILL TIPPERAH.

Name of State.—Hill Tipperah.

In subsidiary alliance or feudatory.—Feudatory.

Tribute in men or money.—Formerly a nuzzerana of 125 goldmohurs at the ceremony of installation. Now, according to Government Resolution dated 30th March 1870, half a year's revenue of the State in the case of direct, and a whole year's revenue in the case of indirect, successions.

Population.—About 35,000.

Supposed gross revenue.—Rs. 1,45,000.

Military force.—About 400 men. Of these, from 100 to 150 are pretty good soldiers, the rest below the average police.

Principal articles of production, including manufactures and mines.—Rice, cotton, timber, bamboos, canes, fire-wood.

No manufactures beyond those required for the commonest necessities of life.

No mines.

Turning northward, we have on the plains at the foot of the Bhútan

Cooch Behar.

Hills the feudatory State of Cooch Behar, at present, during the minority of the Rajah, under the direct management of British officers. This State first sought our aid in 1772, when, in consideration of the cession in perpetuity of half its revenues as then ascertained and an acknowledgment of subjection to the British Government, we drove out the Bhútanese who held possession of its Rajah and capital. Cooch Behar has an area of 1,292 square miles. It is surrounded by the districts of Julpigoreo, Rungpore, to the latter of which its land-revenue is credited. The following table gives some particulars regarding it:—

Name of State.—Cooch Behar.

In subsidiary alliance or feudatory.—Feudatory.

Tribute in men or money.—In money, Rs. 67,700-15.

Date of treaty, with authority.—5th April 1773—Aitchison, Vol. I, p. 151.

Population.—532,505.

Supposed gross revenue.—Rs. 9,20,862.

Military force.—80 sepoya.

Transit duties or not.—No transit duties.

Principal articles of production, including manufactures and mines.—Rice, tobacco, jute, mustard-seed, and bamboos. The manufactures are insignificant, and consist chiefly of mustard oil, gunny-cloth, and brass vessels. There are no mines.

Leaving the north-east frontier, we come to the tributary estates

Chota Nagpore Mehals.

of Chota Nagpore and Orissa on the south-west frontier of Bengal. Most of the Chota Nagpore estates form part of a group of 21 mehals ceded by the Mahrattas, the remainder of which are now under the Central Provinces Government. These estates are governed by their own chiefs under the control of the Commissioner, and are exempted from the

operation of the ordinary laws. The chiefs dispose of civil matters and minor criminal cases, sending up heinous offences for the orders of the Commissioner, who exercises a general control over their administration in other respects.

There are 18 similar estates under the Commissioner of Orissa,

Cuttack Tributary Mehals.

known as the Cuttack Tributary Mehals.

These also were made over by the Mahrattas in full sovereignty, but for administration purposes have been left to be managed by their chiefs, styled in the old regulations "hill or jungle zemindars." By regulations of 1805 they were exempted from the operation of the ordinary laws and regulations in force in the rest of Orissa and Bengal. Two of these, Angool and Bankee, have lapsed to Government owing to the misconduct of their chiefs.

The following statement gives particulars regarding the Tributary Mehals.

TRIBUTARY ESTATES

1	2	3	4	5	6
NAME OF STATE.	In subsidiary alliance or feudatory.	Tribute in men or money.	Date of treaty and authority.	Population.	Supposed gross revenue.
Sirgajah ...	Feudatory ...	Money. Rs. A. P. 1,891 11 0 and general service.	15th June 1820, and 24th Feb. 1923. Aitchison, Vol. I, pp. 174 and 175.*	182,831	About Rs. || 2,00,000
Udaipur ...	Ditto ..	538 5 0 and general service.	Aitchison, Vol. I, p. 179.† Treated as a lapse, Aitchison, Vol. I, p. 169, 12th December 1860.	27,708	8,600
Jashpur ...	Ditto ...	775 0 0 Pays to Sirgajah.	8th June 1819. Aitchison, Vol. I, p. 175.‡	66,926	20,000
Gaugpur ..	Ditto ..	500 0 0 and general service.	17th Dec. 1803. Aitchison, Vol. III, p. 87.§	73,637	20,000
Bonal ...	Ditto ..	200 0 0 and general service.	Ditto § ...	24,832	6,000
Korea ...	Ditto ..	400 0 0 and general service.	24th Dec. 1819, and 3rd Jan. 1848. Aitchison, Vol. I, p. 176.‡	21,127	7,000
Chang-Bhukar ...	Ditto ..	380 3 0	Ditto, pp. 177 to 178† ...	8,919	3,000
Sernikelah ...	Ditto ..	In men and general service.	Separate engagement believed to be taken, but no copy extant. Aitchison, Vol. I, p. 169.	53,373	30,000
Kharaswan ...	Ditto ...	Ditto ...	Ditto ...	23,220	15,000

There are no treaties, but the engagements are as marked below—

* Dates of kuloosat and pottah.

† Date of sumud and agreement.

‡ Date of kuloosat.

§ See pages 168 and 169 of Aitchison, Vol. I.

|| In this and the following estates the greater part of the revenue is in the hands of various sub-holders,

OF CHOTA NAGPORE.

7	8	9
Military force.	Transit duties or not.	Principal articles of production, including manufacture or mines.
The chief keeps up no regular military force; he ordinarily maintains only a police force, but when required by Government, he calls out men who hold land on condition of service, and on his subordinate zemindars or feudatories, who do the same.	No transit duties, but all cattle entering Sirgujah with or without packs have to pay grazing dues.	The food products of this estate comprise rice of various sorts, pulses, and oil-seeds, Indian-corn, wheat, millet, and the crops are generally abundant. Arrowroot grows wild and is manufactured for home consumption and exportation. Ghee also is made in large quantities. Extensive coal-fields are found in Sirgujah. The coal is of good quality, but is not yet in a position to be utilized; lead has been found in small quantity, and iron ore is abundant.
Ditto ditto ...	Ditto ditto ...	The food products are the same here as in Sirgujah, and a considerable quantity of cotton is raised and exported. Gold is found in Udaipur, but in small quantities. The gold-washer working with his family may earn from 1 to 4 annas per diem. Coal is also found, and a considerable quantity of stick lac is annually exported.
Ditto ditto ...	Ditto ditto ...	The food products and minerals the same as in Udaipur, except that coal has not yet been found. The iron ore is of superior quality. Timber resources are vast and untouched; sal, abouy, and sisu abound. Stick lac is amongst the exports.
Ditto ditto ...	Ditto ditto ...	The soil is rich, and the yield of sugarcane, mustard seed, tobacco, and all the cereals above mentioned, and other pulses and cotton, is abundant. The timber resources are also great, and rough-cut canoes are amongst the articles exported. There is a very extensive coal-field in Henker in the south part of Gangpur. Rock lime-stone is found in the north. Lac and tassar cocoons are exported.
The chief keeps up no regular military force; he maintains a few police, but when required by Government, he calls out his relations and retainers and his subordinate zemindars or feudatories, who are bound to attend with armed followers.	No transit duties ...	The soil is not so rich as in Gangpur, but the products are much the same.
Ditto ditto ...	Ditto ditto ...	The products of Koraa are the same as those of Sirgujah.
Ditto ditto ...	Ditto ditto ...	Ditto ditto ditto.
Ditto ditto ...	Ditto ditto ...	Seraikela is for the most part an open country, and its productions are not different from those of ordinary Bengal districts. The tassar silk is cultivated to some extent, but the common products, rice, oil-seeds, and pulses, are the chief exports; copper exists, but there are no mines worked at present. I am informed that persons are in treaty for the Dugni mines in this estate.
Ditto ditto ...	Ditto ditto ...	Produce as above, except in regard to copper. There is a good store of sal timber in this estate.

and the gross revenue cannot be given with any accuracy.

TRIBUTARY ESTATES

NAME OF STATE.	In subsidiary alliance or feudatory.	Tribute in men or money.	Date of treaty, with authority.	Population.
		<i>Tribute in money.</i> Rs. A. P.		
Killah Talchore ...	Feudatory ..	1,039 10 6 and service.	24th Nov. 1803. Aitchison, Vol. I, p. 190.*†	88,021
Ditto Dhenkanal ...	Ditto ...	5,099 0 9 and service.	Ditto*† ...	178,072
Ditto Runpore ...	Ditto ...	1,400 13 2 and service.	Ditto*† ...	27,808
Ditto Mohurbhunj ...	Ditto ...	1,067 11 0 and service.	1st June 1820. Aitchison, Vol. I, p. 181.*	258,658
Ditto Boud ...	Ditto ..	800 0 0 and service.	3rd March 1804. Aitchison, Vol. I, p. 195.*	57,058
Ditto Autmullick ...	Ditto ...	480 0 0 and service.	3rd March 1804. Aitchison, Vol. I, p. 195.*	14,536
Ditto Burumba ...	Ditto ...	1,397 15 6 and service.	24th Nov. 1803. Aitchison, Vol. I, p. 190.*†	24,071
Ditto Nyagurh ...	Ditto ...	5,525 4 1 and service.	Ditto*† ...	83,249
Ditto Khundpara ...	Ditto ...	4,211 8 8 and service.	Ditto*† ...	60,877
Ditto Duspulla Joremoo ...	Ditto ...	661 7 11 and service.	No date. Aitchison, Vol. I, p. 192.† 14th April 1842. Aitchison, Vol. I, pp. 197 and 198.	34,805
Ditto Tigiriah ...	Ditto ...	882 0 0 and service.	24th Nov. 1803. Aitchison, Vol. I, p. 190.*†	16,420
Ditto Nilgiri ...	Ditto ...	3,900 7 8 and service.	Ditto*† ...	33,944
Ditto Keonjhur ...	Ditto ...	1,076 11 11 and service.	16th Dec. 1804. Aitchison, Vol. I, p. 186.*	181,871
Ditto Pal Lehern ...	Ditto ...	266 10 8 and service.	14th April 1842. Aitchison, Vol. I, pp. 197 and 198.	15,450
Ditto Hindole ...	Ditto ...	551 8 11 and service.	24th Nov. 1803. Aitchison, Vol. I, p. 190.*†	28,025
Ditto Atgurh ...	Ditto ...	2,800 0 0 and service.	24th Nov. 1803. Aitchison, Vol. I, p. 190.*†	26,336
Ditto Nursingpore ...	Ditto ...	1,455 8 3 and service.	24th Nov. 1803. Aitchison, Vol. I, pp. 189 and 191.	24,758

* See also Aitchison, Volume I, pp. 197 and 198.

† Kaoolnamah executed to Rajah, 22nd November 1803.—Aitchison, Vol. I, pp. 191 and 192.

NOTE.—The population is given from recent detailed census, and is quite correct and reliable. The best available sources. The military force, though it appears large in figures, is absolutely contemptible. deration of ready service. When called on they watch the Rajah's frontier and see that boundaries are not of police.

OF ORISSA.

Supposed gross revenue.	Military force.	Transit duties or not.	Principal articles of production, including manufactures and mines.
Rs. A. P.			
41,478 2 9	493	None	Timber, paddy, wheat, pulse, oil-seeds, sugarcane, cotton, tobacco, iron ore of good quality, iron, coal.
70,100 0 0	843	Ditto	Stone quarries, gold in small quantities, timber, paddy, wheat, moong, grain, koolthi, teel-seed, castor-seed, rye-seed, sugarcane, cotton, flax, tobacco, tussur cloth, iron-stone, and iron.
6,961 13 3	954	Ditto	Paddy, moong, grain, oil-seed, sugarcane, and cotton. No mineral.
2,05,156 8 0	512	Ditto	Honey, resin, lac, tussur cloth, timber, paddy, wheat, moong, grain, oil-seeds, sugarcane, cotton, flax, tobacco, iron-stone, and iron.
7,000 0 0	592	Ditto	Paddy, moong, oil-seeds, sugarcane, cotton, flax, tobacco, and sal timber. No mineral.
7,101 4 0	360	Ditto	Timber, paddy, moong, grain, oil-seeds, cotton, sugarcane, tobacco, iron-stone, and iron.
26,062 14 2	700	Ditto	Paddy, wheat, gram, moong, sugarcane, oil-seeds, cotton, and tobacco. No mineral.
54,188 15 5½	741	Ditto	Paddy, wheat, moong, gram, urur, oil-seeds, sugarcane, flax, and tobacco. No mineral.
22,561 3 7	1,435	Ditto	Paddy, moong, gram, koolthi, oil-seeds, sugarcane, brass-ware, cotton, flax, tobacco, and timber. No mineral.
13,494 4 9	897	Ditto	Timber, paddy, wheat, moong, oil-seeds, sugarcane, cotton, and flax. No mineral.
3,000 0 0	485	Ditto	Paddy, wheat, gram, moong, oil-seeds, sugarcane, cotton, and tobacco. No mineral.
21,792 2 5	177	Ditto	Paddy, teel-seed, rye-seed, castor-seed, sugarcane, and flax, stone mines and quarries.
63,395 15 7	2,940	Ditto	Timber, tussur cloth, iron wire, images of brass, metal cast, paddy, wheat, moong, sugarcane, gram, cotton, flax, oil-seeds, tobacco, mines of iron, stone quarries.
1,200 0 0	94	Ditto	Paddy, gram, moong, oil-seeds, and cotton, iron in small quantities.
15,000 0 0	148	Ditto	Paddy, wheat, moong, oil-seeds, sugarcane, cotton, tobacco. No mineral.
14,939 14 6	341	Ditto	Paddy, moong, grain, koolthi, burgoory, urur, oil-seeds, sugarcane, and tobacco. No mineral.
9,849 5 3	184	Ditto	Paddy, wheat, moong, gram, oil-seeds, cotton, tobacco, and sal timber. No mineral.

precise revenues derived by Rajahs from their estates are not generally known ; the estimates made are from The figures represent the number of paika. These are men holding small plots of rent-free land on consi-
 encroached on by neighbours ; they accompany the Rajah when on tour, and generally perform the duties

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CHAPTER I.

CHANGES IN ADMINISTRATION.

LAST year's report explained the nature of the changes which the Lieutenant-Governor had designed and commenced. During the year now under report the same policy has been steadily worked out.

A chief feature in the new system was explained to be a more active system of government, the recall to life of the District Officer, and the centralization of power and responsibility in his hands. The Magistrate now exercises a general control over all departments. The police were always nominally subordinate to the Magistrate, but that nominal subordination has now become real. The same

MORE ACTIVE GOVERNMENT, AND CONCENTRATION OF AUTHORITY.

Progress of these principles.

principle has been applied to the Department of Public Works, and the Executive Engineer is now made, except in purely professional matters, subordinate to the Magistrate. The same principle has been extended to the system of jail administration. In the Educational Department the Magistrate, with the assistance of a Committee, has now the guidance of educational matters in his district, with the aid and advice of the Deputy Inspector of Schools as his chief assistant.

A very general testimony has been poured in by local officers and Commissioners as to the advantages of these changes, and more than one Commissioner describes the new system as an unmixed good. It is appreciated, says another officer, by all classes of natives. The natives cannot understand the existence of a *hakim* without authority; *hakim ka hookum* is the key-stone of their political belief. It is observed, for instance, that this arrangement has resulted educationally in an organization much more powerful for good than the Inspector could have hoped to exercise alone without the Magistrate's local influence on the one hand, or the Committee's assistance on the other. The beneficial tendency of these changes has been remarkably illustrated by the new style of the Administration Reports of the past year. The manner of reporting has been systematized and re-arranged; the reports are no longer as formal as they have sometimes been, but describe the history of the administration of the year as respecting the state and well-being of the country and the feelings of the people.

In many respects the reports submitted have been most valuable and complete. Selections from them will be separately published as Government selections, as they are too bulky to circulate in any other shape, and it is most important that they should not be hidden away.

The continued trial of the divided Board of Revenue, under which the attention of each Member has been devoted to separate departments, and the personal relations between the Members of the Board and the head of the Government are established more closely, has worked with increasing and unalloyed success.

The Lieutenant-Governor has expressed the view that the great want of such an administration as that of the Bengal Government, which is at present concentrated in the Lieutenant-Governor, is the establishment of high officers with whom the Lieutenant-Governor may divide the work, and with whom he may also habitually take counsel without formal correspondence, and yet in a way not altogether informal. The Government itself should be strengthened; the present excessive length of the official chain should be shortened. The general plan by which,

The Government should either be strengthened or diminished.

in His Honor's view, the two objects of strengthening the Government and shortening the chain may best be carried out simultaneously is by amalgamating with the Government the very highest office,—the first link in the chain, i.e. the Board of Revenue; also perhaps the executive functions of the High Court; bringing up the next link, the Commissioners, somewhat to the position of the Board, their number being reduced and their salaries increased; and strengthening the position of the Magistrate-Collectors of districts, who would then be supervised by Commissioners themselves directly under Government. We should thus have three links from Magistrate-Collectors upwards, viz. Magistrate-Collectors, Commissioners, and Government, instead of the present four links, viz. Magistrate-Collector, Commissioner, Board, and Government.

It has always been the Lieutenant-Governor's decided conviction that if the Bengal provinces are not to be divided or very largely reduced, it is most necessary to strengthen the Government: so great a Government cannot be efficiently carried on by one man alone.

The Government of India have preferred the alternative of diminishing the Government, and Sir George Campbell has not objected to the proposal which has been made of separating Assam and the adjacent districts from Bengal. To the province of Assam it is proposed to add Goalparah and the Garo Hills on the west, and Sylhet and Cachar on the south, with Muneepore on the south-east. These districts would be administered by a Chief Commissioner in subordination to the Government of India. The details connected with the transfer are still under consideration. If the proposed transfers to Assam are carried out, it will be necessary to reduce the cost of the existing Commissionerships in proportion to the territory taken from them, and

it is a question whether the Chittagong and Cooch Behar Commissioners, one or both, are to be absorbed or retained.

It has been before explained to be the Lieutenant-Governor's constant aim to bring the heads of departments nearer to Government, and to work through them. The tendency of the changes he has introduced is to make the departmental chiefs the agents and inspectors on behalf of the Government, bound to aid, counsel, and guide local officers, each in his own department, without exercising absolute authority over them; and to criticise, collate, and compare local facts for the information of the Government. The Government, no doubt, has been much strengthened by this policy. The success of Mr. Heeley, the Inspector-General of Jails, which was acknowledged in last year's report,

Success of Inspector-General of Jails.

Changes recommended.

and again in this, is an evidence of the advantages of the system. The present incumbents in the offices of Director of Public Instruction and Inspector-General of Police have worked long under the old system, and it has not been possible completely to introduce a new system by their agency. In respect to the Inspector-Generalship of Police, the Lieutenant-Governor has lately received much valuable assistance from the Inspector-General, but he is likely soon to leave the country, and the Lieutenant-Governor has recently recommended to the Government of India the appointment of one head of the police,—to be head over the whole of the police in Calcutta as well as in the interior—to whom the Government may refer in difficult and dangerous matters; and he has suggested a scheme by which this may be worked out.

There is one thing however indispensably necessary to carry out any scheme for increasing the efficiency and working powers of the Government of Bengal, and that is the concentration of the Government offices in one building. All the offices of the Bengal Government are now scattered about far apart in different quarters of Calcutta.

Concentration of Government offices.

The following provision of funds has been made for this purpose:—

1. Four lakhs to be found during two years from the provincial resources.

2. The amount of compensation (four lakhs) given by the Government of India for the old Sudder Court building taken up for a garrison hospital for European soldiers.

3. The capitalized amount of the rents paid for the public offices to be concentrated.

4. The value of the Government buildings now occupied by the Government offices.

The best site possessed by Government has been taken by the Government of India for the purpose of a Military Hospital.

The site which the Lieutenant-Governor then considered the best for the proposed buildings was a strip of waste land to the north of Tolly's Nullah and south of the Lower Circular Road, lying between the Alipore and Kidderpore bridges and outside the official limits of

drawing each a salary of Rs. 2,500 a month, and the remainder in the second grade a salary of Rs. 2,000.

2. That Magistrate-Collectors shall be classified in two grades, with salaries fixed at Rs. 2,250 and (for the present) Rs. 1,800 respectively.

3. That effect shall be given at once to the proposed scheme, so far as funds become available, from the reduction in the salaries of the Judges on the occurrence of vacancies, the pay of some of the Magistrate-Collectors, to the number of 15 at least, being raised to Rs. 2,250: whilst fresh promotions, which would hitherto have been made to the existing first grade on Rs. 1,916, shall now be made to a salary of Rs. 1,800 only, the difference being used to raise the salaries of officers now drawing Rs. 1,500 to the same rate of Rs. 1,800.

The judicial appointments on Rs. 2,500 and Rs. 2,000 have been designated Judgeships of the 1st and 2nd grade respectively, and so long as the arrangements are in a state of transition, for the sake of convenience the executive appointments on Rs. 2,250, Rs. 1,916, Rs. 1,800 or Rs. 1,500 respectively, are styled Magistrate-Collectorships of the 1st, 2nd, 3rd, and 4th grades respectively. The number of officers that are permanently to be attached to each of the grades was not then settled, but depends upon the number of districts that may definitely be decided on. The pay in the grades has been declared personal, and not necessarily attached to districts.

These sanctioned arrangements have been, and are being, carried into effect as vacancies enable the Lieutenant-Governor to act. Up to the present time junior Judges of the 2nd grade have been appointed on the salary of Rs. 2,000, and 12 Magistrate-Collectors have been raised to the salary of Rs. 2,250, so that the scheme has been in great part already carried out. One or two vacancies just announced will enable the Lieutenant-Governor at once to complete the full number of 15 first class Magistrates.

The Lieutenant-Governor's arrangements for establishing parallel lines of promotion did not, however, commend themselves to the Hon'ble Judges of the High Court.

Objection taken by High Court to the Lieutenant-Governor's proposals.

The Hon'ble Judges favoured the Lieutenant-Governor with a copy of their letter to the Government of India on the subject, in which they asked the Secretary of State not to sanction the proposals made by this Government. The High Court did not enter into any comparison of the relative claims of the executive and judicial service, but protested against what they considered the lowering of the latter.

The Lieutenant-Governor, however, thought that great as was the importance of the judicial service, it could not be doubted that the executive was at least as important,—indeed more important. In all parts of the world, and in all arrangements, the executive authority ranks first; the judicial second: and in a district the Lieutenant-Governor saw no anomaly in saying that the Judge should not be considered superior to the chief executive officer.

The Court's letter, the Lieutenant-Governor remarked, correctly described the system hitherto followed: "All the average and some

of the better men of the service, *whether possessed of judicial ability or not*, accept judgeships because of the salary attached." The evils of the system could hardly be put more vividly or more truly. It came to this, that when men have served their time as Magistrate-Collectors, if they have not received, or see no immediate prospect of receiving, promotion in the executive line, in which all their previous service has been spent, they become Judges, "*whether possessed of judicial ability or not*," because the salary of Judges has hitherto been much higher than that of Magistrate-Collectors. When the youth and vigor of the service have been very much spent, and the men selected for the higher executive employments have been eliminated, the residue enter for the first time and form the judicial branch of the service. Taking the average of promotion in a service constituted as is the Civil Service, this promotion to judgeships could not ordinarily take place under the system hitherto followed till men have served seventeen or eighteen, or perhaps twenty years, and have reached the age of forty or upwards. That they should then, with rare exceptions, under the conditions of service in India, distinguish themselves as Judges, could not be, and had not been, the case.

Under the new system, men at the age and standing when they have hitherto obtained charge of districts, will choose or be selected either for districts or for judgeships. Thus a man who is selected by open competition from the best educated men in England at the age of (say) 20, and who comes to India at 22 or 23, may be made a District Judge after 12 or 13 years' service at 35 to 38 years of age. Looking to the way in which these men are selected, to the precocity of intellect and conduct induced by Indian service, and to the comparatively early age at which Indian service finishes, the Lieutenant-Governor has no hesitation in saying that men at that age and service will make quite as good Judges as they would five or six or eight years later. His Honor has also said, with some confidence, that a larger proportion of good men would select the judicial service at that age before they had served so long as to have the chance of the higher executive appointments, than at the later age, when all who could, have obtained, and others saw the prospect of, promotion in the other line; and the Lieutenant-Governor is quite sure that in India, where on an average men retire under 50, a man who becomes a Judge at 35 is much more likely to acquire the requisite knowledge and experience, and become a good or distinguished Judge, than a man who does not enter the line till 40 or 42. The Lieutenant-Governor submitted that, as compared with the previous system, that now commenced would not deteriorate, but would improve the judicial service.

Then came the question whether, if the services are to be rearranged, the advantages offered to the judicial as compared to the executive branch are sufficient. The Lieutenant-Governor observed that there was now in the grades rising to judgeships a considerable change in the character of the service. Probably the majority of the Haileybury men had, *ceteris paribus*, a preference for the executive line, though they seldom carried it to the point of remaining on lower pay when they could get higher pay as Judges. But the Lieutenant-Governor did not think it was so with competition men.

They come out at a later age; they have all had some legal training; many of them are little given to the riding and shooting which are supposed to accompany executive employment, or to which at any rate executive employment gives opportunity. Many such men have considerable taste and aptitude for judicial employment, and it was His Honor's conviction that, *ceteris paribus*, judicial appointments would be preferred by at least as many as prefer executive appointments,—the physical ease, dignity, and independence of the one being set against the risk, exposure, and constant subjection to superior authority of the other. His Honor's only doubt was whether the superiority of salaries which the Government of India had given to Judges would not give to that branch a decided advantage, which is not desirable.

The determination of the whole matter lies now with His Grace the Secretary of State.

The Lieutenant-Governor has made another proposal with a view to further increasing the efficiency of the Judicial branch of the service.

Proposal to appoint Assistant Judges.

Even though he has by the new arrangement been able to make some men Judges at an age when they may still have 10 or 15 years to serve, it is evident that it must be an evil that a man should be placed in so high a position as that of a district Judge without having had any experience or practice whatever in the department of civil justice, the most difficult and important part of his duties. To remedy this, it has been proposed that an opportunity should be given to officers of judicial aptitude to enter the judicial service somewhat earlier and in a lower grade. The Lieutenant-Governor accordingly submitted for sanction a proposal to take advantage of existing vacancies to make an experiment in this direction. It was proposed to reduce the district of Bancoorah; and the Lieutenant-Governor wished to substitute for two 2nd class Judges, viz. the Judge of Bancoorah and one of the Additional Judges, three Assistant Judges, with the power of Assistant Judge as defined in the Code of Criminal Procedure, and the civil powers of a subordinate Judge. He would have given these officers salaries of 1,500 per mensem, or possibly 1,250. The High Court entirely approved of the proposal. The Government of India has, however, postponed the consideration of this question. The existing vacancies have therefore been filled up, and the question must stand over for another opportunity.

In the last report the want of knowledge of their districts on the part of District Officers, in consequence of frequent changes, was prominently brought to light.

Permanency of district officers.

In the year 1871 the Board of Revenue had occasion to bring to the notice of Government "that only six Collectors in the Regulation Provinces of Bengal have been at this time in charge of their respective districts for a period of two full years, and only two out of these six for four years." The Lieutenant-Governor's strenuous efforts have been used to remedy this evil. It is too true that the success of the arrangements in regard to the changes of subordinate officers is still sadly marred by frequent changes. The applications for leave on medical certificates and

Frequency of transfer of subordinate officers inevitable.

other occasions for change are so constant, that nothing but the most unremitting attention, and the firmest hand, can mitigate the bad effect of changes in the lower grades. Great improvement, however, has been effected in regard to the higher grades. At the end of the

Higher officers now rarely transferred. official year to which this report refers, the Magistrates of the following districts had continuously or otherwise been more than two years in charge of their respective districts, and many of them for a much longer period :—

	Hooghly.		Patna.
	Nuddea.		Gya.
	Moorshedabad.		Shahabad.
	Rajshahye.	20	Tirhoot.
5	Dinapore.		Bhaugulpore.
	Pubna.		Sonthal Pergunnahs.
	Julpigoree.		Balasore.
	Cooch Behar.		Hazareebaugh.
	Dacca.	25	Lohardugga.
10	Furreedpore.		Maunbhoom.
	Backergunge.		Kamroop.
	Mymensingh.		Durrung.
	Sylhet.		Secbsaugor.
	Chittagong.	30	Luckimpore.
15	Noacolly.		Garo Hills.
	Chittagong Hill Tracts.		Naga Hills.

The important districts of Rungpore and Cuttack were in charge of Officiating Collectors who had served long in those districts in subordinate capacities. The furlough rules, occasional illness, promotion, and other causes, combine to make some changes among District Officers unavoidable. But it has been the Lieutenant-Governor's effort to post officers returning from leave to districts where they had previously served; and the recent orders improving the salaries of senior Magistrate-Collectors have enabled the Lieutenant-Governor to keep in the executive department many able and experienced officers whose standing would under the old system have entitled them to a transfer to the judicial department of the service. The Lieutenant-Governor still hopes that the Government may yet be able so to arrange that changes in the subordinate offices shall be less frequent than they have hitherto been.

The sub-divisional system in Bengal is gradually approaching completion. In 1845 thirty-four sub-divisions were authorised. In 1858 one hundred additional sub-divisions were sanctioned, but the measure was only partially carried into effect. The system has now been more or less completely introduced into the following divisions,—Burdwan, Presidency, part of Dacca, Cooch Behar, Patna, Bhaugulpore, Orissa, and the greater part of Assam. It is in the Rajshahye division, and in some parts of the Dacca and Chittagong divisions, that its further development is required. In Dinapore there are no sub-divisions, and in Sylhet there have hitherto been none, though the establishment of two has just been ordered; Rajshahye, Rungpore, Tipperah, and Chittagong, have hitherto had only one outlying sub-division a-piece. The table published

in the chapter of this report, entitled "Civil Divisions of British Territory," shows one hundred as the number of sub-divisions already existing on the 31st March 1873. Of these eight had not till lately been officered, so that the number of sub-divisions in actual working did not, all taken, exceed ninety two, exclusive of the head-quarters divisions. The Lieutenant-Governor had so much need for increased power and increased activity in the existing establishments, that he has thought it better not rapidly to create new ones till he had consolidated the old, and he has been proceeding in this matter slowly and cautiously. For some time past, however, the Lieutenant-Governor has been very carefully reviewing the requirements of each district, and has already sanctioned proposals for six new sub-divisions, viz. one in the Patna division, three in Rajshahye, and two in Dacca; whilst two more sub-divisions in the Rajshahye, and a similar number in the Chittagong division, are under discussion. A new sub-division has been established at Moheshrekha, south of Howrah, in the Hooghly district. The Lieutenant-Governor has no doubt that the Administration of Bengal cannot be complete or satisfactory till the sub-divisional arrangements are fully carried out.

The intention of Sir John Peter Grant, under whom the system was most developed, was not to have left the sub-divisions in a confused state—half in one district, and half in another. It is clear from the correspondence which then took place that his object was to make compact sub-divisions, and then compose districts of these sub-divisions exactly as the present Lieutenant-Governor has been endeavouring to do. The state of things which Sir George Campbell found existed because Sir John Grant unavoidably left his work half done and the work was not continued. The intentions of Sir J. P. Grant have now been fulfilled, and by various rearrangements every sub-division has been made a compact part of one district.

At page 70 of last year's report it was explained that the boundaries of districts and sub-divisions, and also of civil court jurisdictions, were being revised, so as to have such sub-divisions wholly and for all purposes in one district. These measures have now been carried out so far as regards the assimilation of criminal and revenue jurisdictions; in this respect only some very minor adjustments remain to be completed. The assimilation of jurisdiction in respect of civil justice has also made some progress in concert and accord with the High Court. The High Court have arranged the details by which the Government has been enabled to carry out in the Burdwan division the policy of making the rural civil court (or moonsiffes) jurisdiction coterminous with magisterial sub-divisions. The result has been some saving in the number and cost of civil courts, which may be available to meet increased requirements elsewhere. The alteration may have affected injuriously the interest of a few local lawyers, but it has on the whole been beneficial, for it has brought the rural courts within the reach of inspection. It gives the District Judge some extra Moonsiffs, who are employed as additional officers at the courts where civil business may for the time be exceptionally heavy; it supports a stronger local bar; and

its only drawback can be that the reduction in the number of rural courts involves longer journeys for suitors. Possibly the quality of justice given at the new centres may be better: at any rate there has been as yet no decrease in the number of suits, though perhaps a trifling decrease in the litigation of the country, if it had occurred, might not be cause for great regret. Much, however, still remains to be done to carry out the rearrangement and assimilation of the jurisdiction of the Civil Courts throughout the country.

The census operations brought to light that in some districts there was really doubt to which police station, and to which district, border villages belonged. These doubts were mainly confined to districts of the Rajshahye division; to the Goalparah and Rungpore border, where the absence of clearly defined boundaries occasionally caused grave breaches of the law and even miscarriage of justice; and to tracts on the banks of great rivers like the Cosco, which shifts its deep bed ten miles east or west within the space of five years. From Sylhet only cases were reported of a much less explainable kind, for it was said that villages on the roll of, and in the jurisdiction of one police station (thannah), were geographically situate many miles off in the heart of another thannah. These doubts are being gradually settled, and the rectification of police jurisdictions, such as are reported from Sylhet, is nearly complete. On the borders of Gya, Hazarcebaugh, Dacca, Mymensingh, Rungpore, and Backergunge, trifling rectifications of jurisdiction have been effected. The Government adheres, as far as it can, to the thannah jurisdictions as they existed at the time of the census. In the divisions of Burdwan, Rajshahye, and Dacca, the rectification of thannah boundaries are still incomplete; elsewhere it has been completed or almost completed.

The only important alteration of district boundaries effected during the year is the transfer of the greater part of the Madaripore sub-division from the Backergunge to the Furreedpore district. Transfer of Madaripore to Furreedpore. Backergunge, with its population of 2,377,000, and its area of 5,264 square miles, was a very heavy charge; its people were very litigious and much given to violent crime, and had given almost constant work for two Sessions Judges. Its sub-divisions and thannahs were accessible to the District Officer only by tedious journeys through winding rivers and channels, and Backergunge had for years been considered too heavy a charge for even an active and able Magistrate. Furreedpore, on the other hand, was a small district; originally it had been a part of the Dacca or old Dacca Jellalpoore district, and had only grown up into a separate district with comparatively recent years; and at one time it had been suggested that Furreedpore would be one of the small districts which might with advantage be reduced to a sub-division. But looking to the density of its population (677 to the square mile), to the history of its Mahomedan riots in former years, to its situation, and to the circumstances of Backergunge, the Lieutenant-Governor decided that it would be best to retain Furreedpore as a separate district, and to relieve Backergunge by transferring

its northern portion to Furreedpore. This has been accordingly done. The result of the transfer will be that the size and population of the two districts will stand somewhat thus :—

	Area.		Population.	
	Before trans- fer of Madaripore.	After trans- fer.	Before trans- fer.	After trans- fer.
Backergunge	... 5,264	4,300	2,377,000	1,800,000
Furreedpore	... 1,496	2,400	1,012,000	1,589,000

The proposal for reducing some of the smaller districts (which were not originally districts, but were carved out of original districts, being first made sub-divisions, then sub-dis-

tricts or Joint-Magistracies, and eventually minor districts,) originated in a demi-official suggestion from the Government of India. The Lieutenant-Governor concurred generally in the suggestion. The expense of civil administration very much depends on the scale of the machinery employed. There are many districts, comparatively insignificant in themselves, which, provided with a full machinery

and all that it involves, demand many officers at great expense and much official routine, and cost a very great deal, while much more important, rich, and populous tracts, under the name of sub-divisions, are administered for a fraction of the sum. His Honor was convinced that, looking at the matter generally under the present circumstances of these provinces, it was better to have large districts under highly paid, highly experienced, and sufficiently selected officers—these districts being adequately provided with sub-divisions—than to have smaller districts not so well officered and sub-divided. Further experience tends to confirm these views. The system which the Lieutenant-Governor has introduced, with, he believes, great advantage to the public service, of concentrating the control of the various executive departments in each district under one capable district officer, cannot be carried out as he could wish it unless districts are so arranged that he can select for the head of each district an officer of sufficient standing, experience, and governing powers. We cannot afford such an officer in a very small district; nor can we afford in every small district to have an efficient district Engineer, an efficient head of the Police, efficient heads of the Medical and Education departments. The Lieutenant-Governor has already found much practical difficulty in this way in the smaller districts, whereas in the larger districts these arrangements can be very well made and work very satisfactorily.

As the sub-division is a larger unit than the tehsildars of other parts of India, so the Lieutenant-Governor thought a district composed of these larger units might properly be larger than one composed of small units, or at any rate as large as in those parts of India where large districts prevail. At the same time, looking to the great population and wealth of Bengal, His Honor expressed a hope that he might have the means of putting the district establishments on an adequate footing

without too much reducing their number. He suggested that a very moderate increase on the salaries of the Civil Service, say one lac or £10,000 per annum, would with some rearrangement enable him to do all that he proposed.

The Lieutenant-Governor was very anxious that district arrangements should be so settled that he should be able to complete the district machinery. At the same time he was quite prepared to admit that a general principle must be worked with reference to established arrangements, so that changes should not be greater and more sudden than is really necessary, and he has entirely accepted the view expressed by the Government of India with reference to the proposed reduction of districts, that each case must be determined on its own merits.

The Lieutenant-Governor's proposal was to reduce the following small districts to first-class sub-divisions in charge of an officer on Rs. 1,200 a month:—

Howrah now an independent magistracy, but for revenue purposes part of Hooghly.

Bancoorah, with an area of 1,346 square miles and population of 526,772, originally a part of Burdwan.

Maldah, with an area of 1,813 square miles and population of 676,426. This district was originally an offshoot of Dinagepore.

Bograh, area 1,501 square miles, population 689,467; the three districts of Rajshahye, Pubna, and Bogra, being made into two.

Noakhally, area 1,557 square miles, population 713,934; Tipperah, Chittagong, and Noakhally, being made into two districts.

Pooree, area 2,505 square miles, population 769,674; the present three districts of Orissa being thrown into two.

With respect to Maldah and Bogra, however, it has seemed to the Lieutenant-Governor that our arrangements north of the Ganges should certainly have much reference to the

No action at present taken with reference to Maldah, Bogra, Noakhally, and Pooree.

proposed line of the Northern Bengal Railway. The sub-divisional system has not been properly carried out in the districts of the Rajshahye division north of the Ganges. Several new sub-divisions are clearly necessary; and the North Bengal line, as now laid down, skirts the edges of so many districts, that if our arrangements are made with any reference to it, this as well as other considerations will render necessary considerable rearrangement of district boundaries in forming the sub-divisions as they are to be. The Lieutenant-Governor has entered into these questions in detail in a communication to the Commissioners of Rajshahye and Cooch Behar, after he had himself gone into the matter on the spot with some care, and he does not propose to do anything further till full reports are received on the subject. Very recently, at the close of the present year, the Northern Bengal Railway has been definitely sanctioned; so that the district arrangements may be considered and settled as soon as more pressing matters permit. Pubna has meantime become a district of special importance with reference to rent questions which have arisen there.

The Noakhally district will a good deal depend on the fate of the Chittagong Commissionership. There has been a correspondence with

the Commissioner of Chittagong and the district officers regarding Noakhally, but the Lieutenant-Governor is inclined to reserve this question till the whole of the eastern district arrangements are settled together, since he has proposed to make over the southern part of the Chittagong district to Burmah and the eastern frontier of the Hill Tracts to the Assam administration.

Again, as regards Pooree, that district could not be absorbed into Cuttaok unless part of Cuttaok was taken away to enlarge Balasore. So long as we have a Commissioner of Orissa, it would hardly be necessary to reduce his three districts to two. The present Commissioner is opposed to any change, and his views and feelings are entitled to much consideration. Here also the Lieutenant-Governor is not inclined to move till the whole question of the form of the Bengal administration is dealt with.

But with reference to Howrah, Bancoorah, and Beerbhoom, the

Proposal to absorb Howrah as a sub-division of the Hooghly district.

case is different. At present Hooghly, including Howrah, is one collectorate; but Howrah is a separate magistracy, with the rank and pay of Magistrate-Collector. The area of the Hooghly collectorate is 1,470 square miles; the population is 1,488,556. As compared with other Bengal districts, Hooghly and Howrah together do not make up a large district, and not an exceedingly large population. Moreover, what is wanted for Howrah is, not a Magistrate-Collector or an officer of that rank, but an efficient Magistrate for the town of Howrah and the immediate neighbourhood.

The Lieutenant-Governor also has long thought that the two

Proposal to absorb Bancoorah as a sub-division of Burdwan, and to relieve Burdwan by transferring the sub-division of Itanéeunge from Burdwan to Beerbhoom.

small districts of Bancoorah and Beerbhoom should be rearranged; that if it were possible to make one district out of them, or rather to make two districts out of Burdwan, Bancoorah, and Beerbhoom, it would be well to do so. He accordingly submitted such a plan to the Government of India, and proposed at once to reduce Howrah and Bancoorah. That Government has, however, expressed the opinion that it will be better to wait till other arrangements are definitely settled, and the proposal is consequently in abeyance.

It was explained in the Annual Administration Report of last

Sub-divisional establishments for executive and statistical purposes.

year how a scheme had been framed for giving executive establishments to sub-divisions, and for thereby enabling the District Officers to administer the country more completely. The collection of useful and trustworthy statistics was especially kept in view.

The Lieutenant-Governor proposed at the outset to have one hundred sets of sub-divisional establishments, and to divide them into three grades, as follows :—

33 First Class Establishments—				Rs.
Sub-Deputy on	...	...	...	150 a month.
Canoongo and surveyor on	...	...	...	50 "
4 chainmen, on Rs. 8 each	...	...	...	32 "
6 messengers, on Rs. 6 each	...	...	...	36 "
Total				268 × 12 × 33 = 106,182

33 Second Class Establishments—		Rs.	
Sub-Deputy on	...	100	a month.
Canoongo and surveyor on	...	25	"
2 chainmen, on Rs. 8 each	...	16	"
4 messengers, on Rs. 6 each	...	24	"
Total	...	165	$\times 12 \times 33 = 65,340$
34 Third Class Establishments—			
Canoongo and surveyor on	...	50	a month.
2 chainmen, on Rs. 8 each	...	16	"
2 messengers, on Rs. 6 each	...	12	"
Total	...	78	$\times 12 \times 34 = 30,624$
		Total	... 2,02,092

The opinion of the local officers was invited, and the replies from the Divisional Commissioners showed that they and the District Officers were of opinion that the proposed establishments would be of the very greatest assistance to District and Sub-divisional Officers. The total requirements of the several divisions came to 114 sets of sub-divisional establishments, exclusive of the wants of the Southal Pergunnahs. The Commissioner of Assam reported that sub-divisional establishments were not required in his division, as the indigenous agency of the mouzadars discharged the duties which were to be performed by the new establishments. For Orissa also a very liberal canoongo establishment has already been sanctioned.

The Government of India, to whom the Lieutenant-Governor's scheme was submitted, at first approved the appointment of 20 Sub-Deputies as an experimental measure, but asked for some explanations regarding the other establishments. The Lieutenant-Governor thereupon submitted an explanation of the duties the proposed establishments would have to perform. He further explained that the sub-divisional establishments might be expected to do certain work hitherto done by temporary establishments, which on the average of past years had cost

the Imperial Government close upon one lakh of rupees a year. As regards the title of Canoongo he specially dwelt on the importance of that office under the Permanent Settlement Code of 1793, and on the many pledges of the Government to maintain the office. He pointed out that since, in accordance with the laws of former days, the landholders were now again required to file their accounts and papers for Road Cess purposes, it was most fit and desirable that Government should fulfil its part of the original arrangements by appointing Canoongoes to receive, collate, and record these papers.

The Government of India was then pleased to accord approval to the Lieutenant-Governor's scheme, and granted one lakh per annum towards its cost from imperial revenues, on condition that no further charge was in future made for the services which had been specified. The orders of the Government of India reviewing the correspondence and sanctioning the proposed establishments are summed up in the following paragraph:—

"Having regard to the absence in the Lower Provinces of Bengal of any local agency corresponding with that of other provinces of India,

and bearing in mind the various measures of reform which have yet to be undertaken in Bengal under an improved system of administration, the Governor-General in Council is satisfied that the establishments proposed are actually required."

His Grace the Secretary of State was pleased also to "approve fully of the proceedings of His Excellency in Council, which were characterized by liberality and caution, and to anticipate the best results from the increased means of efficiency now afforded to the subordinate administration of the Government of Bengal."

Although the reports of the Commissioners had shown that 114 sets of establishments were required, besides those wanted for the Sonthal Pergunnahs, it has been determined, for the present at any rate, to keep the cost of the new staff within the limits originally proposed. To meet the cost of these establishments two lakhs of rupces were provided, viz. one lakh in the provincial budget and one lakh by the additional imperial assignment. The Lieutenant-Governor has allotted one hundred sets of establishments accordingly. The appointments have been made from among the men qualified by examination for the Native Civil Service (under the system described in last year's report, page 85), and the new establishments are now at work.

In distributing the establishments, it has been made a rule that no more than a third class establishment is to be employed at the head-quarters sub-division without the special sanction of Government, since Assistants and Deputy Collectors are there available, and may be advantageously employed in the work done by Sub-Deputies in sub-divisions. It has been pointed out that now that the sub-divisions are sufficiently manned, there can be no ground for centralising the Excise or other departments at head-quarters. The Lieutenant-Governor directed also that the active work of administering the Road Cess should be done by the Sub-divisional Officers in the outlying parts of the district as soon as the office work of valuation was completed.

Very particular care was enjoined upon Commissioners, Magistrate-Collectors, and Sub-divisional Officers, that the new establishments should not be employed as mere clerks to work in offices, but as executive agents to help the District and Sub-divisional Officers in administering the various departments under their charge. They were to be employed actively for executive, statistical, and (where magisterial powers are given) judicial work, as Assistants are utilized.

The Lieutenant-Governor has, on the recommendation of Commissioners, invested most of the Sub-Deputies with the power of a Subordinate Magistrate of the lowest class, to afford them a certain status and to make it possible to utilize them at a push for inquiries when Sub-divisional Magistrates are urgently engaged. His Honor's object, however, has not been to increase the judicial agency of the country, but to strengthen the executive agency. Care has been enjoined that the tendency of the sub-divisional establishments may not be to

unnecessarily increase the Criminal Courts, which are already far too prolix and dilatory in their proceedings. If the Sub-Deputies are at all employed judicially, by so much the more are the Sub-divisional Officers to do executive work.

The Lieutenant-Governor expressed the special hope that the various calls for statistical inquiries which had been made, and had yet to be complied with, would now receive very particular attention. Before action must come knowledge, and the Lieutenant-Governor considered that the first and most important duty of the District and Sub-divisional Officers under the system now inaugurated, was to put the Government in possession of information of a practical and useful character regarding the people, the productions, and the resources of their respective charges. He believed that the sub-divisional establishments might now be rendered really effective for executive as well as for judicial purposes.

The salaries of Sub-Deputyships and Canooongships have been declared personal and not local; so that it remains within the discretion of the Commissioner to employ these officers where they are most wanted, and to authorize a Magistrate-Collector temporarily to detach a Sub-Deputy for particular duties.

The Lieutenant-Governor has declared that, as a rule, promotion shall be made from the lower to the higher grades of the Native Civil Service according to merit—young men who enter in inferior appointments and doing well there having thus the prospect of rising to be Sub-Deputies, and they, again, to higher appointments. Especially the Lieutenant-Governor has pledged himself that, whenever possible, Deputy Magistrates and Collectors will be selected from the ranks of the Sub-Deputies, and men will not, without good and special reason, be taken from outside for these places by any mere exercise of patronage. No doubt these prospects have greatly increased the attractions of the Subordinate Service and of the Native Civil Service generally.

It was mentioned in the last report, page 87, that special classes for the training of candidates for the Native Civil Service had been opened in connection with the Hooghly and Presidency Colleges. This system has been continued with success, and similar classes have been opened at Patna and Dacca. The new appointments in the subordinate establishments have, however, exhausted most of the best candidates who have as yet come up. In future the demand for men may be more gradual, and it has been arranged to put the Civil Service education on a more permanent footing, and to require a longer course and more complete qualifications. It was felt that it would be unfair to insist, in the first instance, on too high an educational test from men who had served with credit in lower posts, and were beyond the college-going age. It was therefore necessary to provide for these men short special courses, by which certain special acquirements should be given to them and their general qualifications should be tested. To a certain extent this may still be necessary; but for young men who wish to enter the service

Promotion and prospects of the Native Civil Service.

Establishments recruited from Civil Service classes which have been specially opened.

for the first time, a regular course of instruction will now be insisted on, under rules which come into force at the College sessions about to commence at the new year. The plan is that after a young man has carried his general education to the point at which he is allowed to commence a special education for a profession, *e.g.* in medicine or engineering, he should similarly be allowed at the same point to commence a special Civil Service course designed to qualify him for that profession.

The officers of both the Police and Educational Departments memorialized Government during the year with reference to their own prospects, and to the alleged encroachment of Civil Servants on appointments which had hitherto, they said, been reserved to them. The Lieutenant-Governor in reply pointed out that he could not admit the claims of any body

Memorial of Police and Educational officers with reference to their prospects.

His Honor's reply to the Police memorial.

of public officers appointed in this country to an absolute monopoly of certain offices subject to no exceptions. Even Civil Servants brought by covenant from England after open competition, and to whom certain offices were originally guaranteed, are now liable to have others put into these offices for very special reasons. It would especially not be possible that officers in one branch should themselves hold a monopoly of that branch, and at the same time be eligible to appointments in other branches, which seems to be the claim of some of the officers of several branches of the Administration. At the same time, feeling that the police officers had suffered from reductions, &c., the Lieutenant-Governor was, and is, especially anxious that they should not on the whole suffer from the practice which His Honor thinks advisable in the interests of the public service, viz. that officers in the different civil branches should be interchangeable. It is only in this sense that the appointments complained of have been made. No one has been appointed from outside the Government services. If one or two Civil Servants have been employed in the police, a larger number of police officers have been employed in civil appointments of several kinds.

In the case of the Educational officers, the memorial was transmitted, at their request, to the Government of India. His Honor thought it unnecessary to examine the question whether existing orders taken together do aim at the constitution of an educational service as a close

To the Educational memorial.

service with a monopoly of educational appointments, or whether such a course was desirable. It was enough for the present purpose to draw attention to the passage in the order quoted by the memorialists, which says that a preference in regard to certain appointments is to be given to officers in the Educational Department "*if competent to discharge the duties.*" And it was pointed out that the European educational officers as a body, though possessed of many merits, had unfortunately shown little inclination to cultivate the native languages, literature, and arts, and thus qualify themselves for the executive and inspecting appointments, in connection with which the question arose. Under the new system of mass education it is most essential that the officers employed

to superintend should have a large knowledge of, and liking for, the languages of the country and the people. The Lieutenant-Governor's

The orders of the Supreme Govern-
ment.

views were concurred in and upheld by the Supreme Government. It was pointed out that the despatches quoted in the memorial no doubt contained the general principles and rules by which promotion in the Educational Department is regulated. The despatch of November 1860, from Sir C. Wood in particular, recognizes and explains the preferential claim of officers of the department to all posts in their department; and these orders draw no distinction between administrative and professional appointments. There was, however, attached to this general rule of preference the condition of competency to perform the duties of an office falling within the claim; and there was also an exception to the rule in the case of the department being unable to supply a duly qualified claimant, or in the case of "pre-eminent qualifications," giving an over-ruling claim to some person not in the department. His Excellency in Council thought that the position of educational officers could not be more clearly stated than by the despatches of 1859 and 1860; and to the instructions which they contained, so long as those instructions were unaltered, the Government of India would adhere.

The Bengal Municipalities Bill, which was noticed at length in last year's report, and which was

BENGAL MUNICIPALITIES BILL, 1872.

intended to be a very large measure of self-government for both towns and rural villages, was vetoed by His Excellency the Viceroy after it had passed the Bengal Council. The grounds on which the veto was given were, firstly and mainly, because in His Excellency's view the measure was "calculated to increase municipal taxation in Bengal," and "such increase was unnecessary and inexpedient at the present time;" and further, His Excellency the Viceroy was unable "to give his assent to those portions of the Bill which allow the provision of elementary education to be made obligatory upon first and second class municipalities," *i.e.* on towns as distinguished from villages. His Excellency also objected to a provision enabling town municipalities to give relief to the poor in time of exceptional scarcity and distress. Moreover, His Excellency thought the time had not come when it was desirable to create the machinery for the Government of villages proposed in the bill. At the same time His Excellency the Viceroy observed that the discussions on the Bengal Municipalities Bill had convinced him that "some changes in that law might be made with advantage, and that it might be desirable to amend the present municipal laws, so as to enable Municipalities voluntarily to contribute in aid of education within their districts."

The Lieutenant-Governor did not feel able to ask the Council to undertake another general Municipal Bill, but the minor amendments suggested by the Viceroy were carried into effect.

In a subsequent chapter will be found an account of the charges of the current municipal administration, and of the municipal taxation of

Incidence of municipal taxation.

these provinces. It may, however, be mentioned here that the volume regarding taxation in the various provinces of India, published by

the Government of India in March 1873, shows that the incidence of municipal taxation in the several provinces is as follows, the Presidency towns and Kurrachee omitted :—

			Incidence per head of the population of municipal towns.	
			Of gross municipal receipts.	Of municipal income from taxation only.
			Rs. A. P.	Rs. A. P.
Bengal	...	3 $\frac{1}{2}$ per cent.	0 7 5	0 5 10
Madras	...	3 "	not shown	0 11 11
Bombay	...	11 "	0 13 11	0 13 3
North-Western Provinces	...	11 "	not shown	0 8 5
Punjab	...	12 "	not shown	0 11 5
Oudh	...	4 $\frac{1}{2}$ "	0 11 6	0 9 9
Central Provinces	...	7 $\frac{1}{2}$ "	0 14 7	0 13 5

Thus Bengal has a smaller proportion of her inhabitants under municipal taxation than any other province of India except Madras, while the incidence of municipal taxation in Bengal towns is much lighter than in the towns of any other province of India.

It is hoped that an efficient commencement has been made of measures towards the acquisition of statistics and accurate information about the country and people. The census was

STATISTICS.

How far we have pushed.

a great statistical work, of which the advantages are now being reaped. It has been followed up by the measures for obtaining correct statistics of deaths and births, which will be detailed in the Chapter on vital statistics. In respect of vital statistics, the Lieutenant-Governor, despairing of soon getting trustworthy figures for the whole country, has confined his inquiries to a registration of births and deaths in certain selected areas in which the census had been taken with more than ordinary care, and which were most suitable for experiment. In every district of Bengal, rural and urban, areas were selected, and statistics have been collected from January of the present year. On the whole the results are fairly successful and of good promise. As regards agricultural statistics, the four special Deputy Collectors who were sanctioned for statistical duty have made laborious and careful inquiries into the tracts of country to which they were appointed. In particular Baboo Ram Sunker Sen, who was appointed to the district of Jessore, has submitted a most valuable and interesting record of his labours in the sub-divisions of Magoorah and Jhenidah, which has been published as a Government selection. The report on Beerbhoom has also been received. District statistical accounts have been specially supplied by the District and Sub-divisional Officers of several parts of the country. A Special Commission has been appointed to inquire into the trade and production of jute, the greatest commercial staple of Bengal. The new sub-divisional establishments have afforded an agency for the collection of correct statistics, which had long been a crying want. An educational census was taken over a part of the 24-Pergunnahs and of Nuddea in 1872; later on in the year a similar census was effected in Mymensingh, and the Commissioner of Patna is now endeavouring to compile an educational census in certain tracts in

that division. The work of collecting statistics is being pushed on vigorously, as far as our means will allow. The machinery has only now been supplied, but we are, there is no doubt, making a good beginning. The returns now being filed under the Road Cess Act are supplying a deficiency in the registration of tenures and landed property. The Census and the Road Cess are the centres about which the collection of statistics is gathering. It is hoped that with the Special Deputy Collectors, the Sub-Deputies, and subdivisional establishments, the reorganized putwaries and canoongoes over a large part of the province, and especially in the Court of Wards and Government estates, we shall be able to add to the record of tenures resulting from the road cess proceedings many agrarian details, just as our specimen areas for vital statistics are adding details to the knowledge acquired by the census. To supervise this organization, and to collate

Establishment of an Agricultural Statistical Department.

the information obtained, a separate branch of the Secretariat has been established, and a gentleman peculiarly well fitted for the post has been appointed Assistant Secretary in immediate charge of the department.

In another chapter of this report are given details of the road cess operations, of the valuations of

ROAD CESS.

landed property, and of their results. In last year's report, however, it was mentioned that the first proceedings under the Road Cess Act would be to make a record of all holdings to an extent, and with a completeness, that had been before quite unknown in Bengal, and that in this respect the Road Cess Act would be a great, and, if successful, a very valuable, reform in the system of administration. It may properly therefore be mentioned here that these valuations have been brought to a conclusion in the parts of the country where they were undertaken. It is not too much to say that, thanks to the knowledge and skill with which the road cess operations were directed by Mr. Schaleh, and thanks also to the hearty co-operation of local officers of all grades, the road cess valuations have been most successfully conducted; registers have been compiled of all the zemindaris and sub-tenures, while returns have been received showing the rent paid by every ryot in each of the nineteen districts to which the road cess has been extended. These returns are being compiled into intelligible tables, which shall show the facts for each district; but the results of those tables will not be ready in time for the present report. The past year, however, has witnessed the actual preparation, reception, and scrutiny of very detailed returns regarding the rent-receiving and rent-paying classes, returns which will be most useful to the people themselves as well as to the Government. Already the ryots in many road cess districts have come forward to take extracts from the road cess returns relating to their holdings and rents, and the importance of these returns can be estimated when it is remembered that the entries in them are actually the first authoritative record ever framed in Bengal of the rents payable by ryots over any large area of country. In Orissa indeed a record of rents and rights was framed in 1837-48, but that record has during the last thirty-five years become mere waste paper, as is shown in a later period of this chapter. There can be no doubt

that the change effected by the successful completion of the valuation of all interests in the land for road cess purposes has been very great.

Enquiries conducted during the year have made it but too clear that in spite of the positive prohibitions

**ILLEGAL EXACTIONS BY ZEMINDARS
IN BENGAL.**

of the law, cesses and duties in large numbers are levied by almost every landholder in the country; the fact being that owing to the absence of sufficient agency in Bengal, those parts of the regulations which give rights and privileges to zemindars have not only been maintained, but stretched to the utmost; while those parts which restrained them and limited their rights have been utterly set at naught.

The subject was alluded to in last year's report. As was then explained, the illegal levies may be divided into two classes—illegal transit and market taxes levied from the general public, and illegal cesses levied from the agricultural ryots by their landlords in addition to the legal rents. In both these classes of exaction the inquiries commenced in the previous year have been completed, and orders have been passed in the year under report.

As regards the transit and market taxes, it was evident that a tendency had grown up to exaggerate the rights of property to the entire disregard of the rights of the public,

Illegal levy of transit tolls and market duties.

with respect to the free use of public places, rights of way, rights of navigation, and of fisheries. His Honor thought that it was the duty of the Government, as *parens patriæ* and protector of the public, to see that this was not carried to the point of abuse and oppression.

The exactions themselves seemed not to be greater than are usual in every Native State and under all native rule. The difference from other British provinces was that, while elsewhere these exactions had been abolished by the British Government, in Bengal, though theoretically abolished by law, still, owing to the want of executive machinery, they had gone on just the same; and even where compensation for abolition of duties had been granted, the zemindars in many instances both received the compensation and levied the duties the same as before, or at increased rates. There was this also that made the case worse: in former days in India, and still in Native States, the Government supplied and supply little in the way of police or protection; the dues rendered to zemindars and others were in fact the price of protection. Now the police are paid by Government or by municipal tax-payers, and it is certain that the zemindars do not render the protection against robbers, which they formerly did, such protection being formerly the only condition on which any one would use the rivers, markets, &c., and pay dues to the zemindar. The most that could now be said in some places was, that if boats did not pay they would very likely be robbed; that is, the levy of the dues was not a price for protection, but a sort of a blackmail paid under fear of robbery.

The policy of the old Regulation law was most distinct, viz. to forbid all private tolls and transit duties,

**Action of the Government in the case
of market dues.**

and as regards markets to allow private owners to take rent for shops, but not to allow duties to be levied on goods brought for sale in open market.

At the same time the Lieutenant-Governor could not but feel that the practice of levying market duties and similar imposts was so inveterate and established, that interference stringently to check it might cause much confusion and difficulty. The whole question was laid before the Government of India, and until the Supreme Government might determine whether there was to be legislation, and what legislation, His Honor was not willing to take measures not urgently necessary. Where a market was *bond fide* a private market set up in modern times on really private ground—where the proprietor supplied sheds, kept the ground in order, and otherwise facilitated trade, and where he did not take unusual or exorbitant dues, His Honor would not interfere at present. But, it was added, it must be remembered, that the main security for the public in such cases was the free trade in markets, that is in the multitude of markets and the freedom of people to go to this market or to that; therefore no attempt to establish a monopoly for any such private market, or to prevent people from going to any other than they choose, or to prevent any one else who chose from setting up a rival market, could be tolerated. There might be something in what was said of the trouble arising from the quarrels of rival setters-up of markets; but any limitation and the consequent monopoly of particular markets could only be accepted if the markets were made public and regulated by public authority.

On the other hand, the Lieutenant-Governor relied on Magistrates seeing most strictly that private parties were not allowed to collect duties in public places to which the public really had a free right of resort. Of course, shops on private ground, privately owned, must everywhere be treated as private property as allowed by the Regulations; but what must be prevented was the levy by people, who really did nothing for the money they took, of *tola* or other dues on goods, cattle, &c., brought for sale in open public places, whether public market grounds, open places in towns or bazaars, along the sides of roads or public rivers, or elsewhere.

The Lieutenant-Governor considered that a distinction between public and private markets might be drawn, and that market duties other than regular shop-rents might be and should be prevented in public markets, gunges, and bazaars. Much would depend on the care and firmness with which this might be carried out, the Magistrate not being deterred by mere assertion of private property when the place was really open to the public.

As regards the navigation of rivers and use of waters, His Honor laid

And in the case of river and mooring
tolls.

down that free navigation and traffic should be absolutely secured as far as the utmost vigilance of the Magistrates and their subordinates could secure it. The free use of the river banks up to high-water mark, and of all public roads, paths, and rights of way, belong to the public. High-water mark the Lieutenant-Governor considered to be the flood-mark of the river when full in the rainy season, extraordinary floods and over-flows excepted. As the channel of navigable rivers belonged to the public, the Lieutenant-Governor considered that no one had a right to levy taxes for mooring, &c., within the limits of the high-water line. Even where individuals might have the use for crops of land submerged in the rains, so long as the crops were

not injured, the Lieutenant-Governor thought that navigators using the banks, sands, and shallows, should not be interfered with. Boats are so generally towed, that tow paths and other public paths would generally be found along the top of the bank; public roads constantly come down to the river side, and the free use of all these should be secured. But where land, really private property, beyond high-water line, and over which there was no right of way, was given up for mooring boats, stowing goods, or such like purposes, there was no need to interfere at present with the levy of reasonable dues.

The Lieutenant-Governor, however, expressed to the Government of India his belief that legislation on the subject was desirable and necessary, so that modern machinery might be supplied to carry out the broad and just principles laid down in the early Regulations.

The agricultural cesses are somewhat different in their character.

Agricultural cesses.

They consist of various dues and charges levied from the ryots in addition to the regular rent, and generally in proportion to the rent. The permanent settlement Regulations positively prohibited all such duties, strictly confining the zemindars to the customary rent proper; but in this as in other things these laws have been wholly set at defiance in modern times. The modern zemindar taxes his ryots for every extravagance or necessity that circumstances may suggest, as his predecessors taxed them in the past. He will tax them for the support of his agents of various kinds and degrees, for the payment of his income-tax and his postal cess, for the purchase of an elephant for his own use, for the cost of the stationery of his establishment, for the cost of printing the forms of his rent receipts, for the payment of his lawyers. The milkman gives his milk, the oilman his oil, the weaver his clothes, the confectioner his sweetmeats, the fisherman his fish. The zemindar levies benevolences from his ryots for a festival, for a religious ceremony, for a birth, for a marriage; he exacts fees from them on all change of their holdings, on the exchange of leases and agreements, and on all transfer and sales; he imposes a fine on them when he settles their petty disputes, and when the police or when the Magistrate visit his estates; he levies blackmail on them when social scandals transpire, or when an offence or an affray is committed. He establishes his private pound near his cutcherry and realizes a fine for every head of cattle that is caught trespassing on the ryots' crops. The *abwabs*, as these illegal cesses are called, pervade the whole zemindari system. In every zemindari there is a *naib*; under the *naib* there are *gomastahs*; under the *gomastah* there are *piyadas* or *peons*. The *naib* exacts a *hisabana* or perquisite for adjusting accounts annually. The *naibs* and *gomastahs* take their share in the regular *abwabs*; they have their little *abwabs* of their own. The *naib* occasionally indulges in an ominous raid in the *Mofussil*: one rupee is exacted from every ryot who has a rental as he comes to proffer his respects. Collecting *peons*, when they are sent to summon ryots to the landholder's cutcherry, exact from them daily four or five annas as summons fees.

Perhaps the best proof of the extent and nature of the illegal cesses will be found in the Presidency division, the most widely

educated and most under the eye of Government of any of the divisions in Bengal. The subjoined list of 27 different sorts of illegal cesses has been officially reported from the 24-Pergunnahs district alone:—

(1.) *Dāk Khurcha*.—This cess is levied to reimburse the zemindars for amounts paid on account of zemindari *dāk* tax. The rate at which it is levied does not exceed three pice per rupee on the amount of the tenants' rent.

(2.) *Chanda*, including *bhikya* or *maugon*.—A contribution made to the zemindar when he is involved in debt requiring speedy clearance.

(3.) *Parbony*.—It is paid on occasions of *poojah* or other religious ceremonies in the zemindar's house. The rate of its levy is not more than four pice per rupee.

(4.) *Tohurria*.—A fee paid on the occasion of the audit of *ryots'* accounts at the end of the year.

(5.) *Forced labor* or *bagar*.—This labor is exacted from the *ryots* without payment.

(6.) *Maroocha* or marriage fee.—Paid on the occasion of a marriage taking place among the *ryots*. It is fixed at the discretion of the zemindar.

(7.) *Ban salami*.—A fee levied on account of preparation of *goor* or molasses from sugarcane.

(8.) *Salami*, including all fees paid on the change of *ryots'* holdings and on the exchange of *pottahs* and *kaboolyuts*.

(9.) *Kharij dakhil*.—A fee commonly, at the rate of 25 per cent., levied on the mutation of every name in the zemindar's books.

(10.) Taking of rice, fish, and other articles of food on occasions of feasts in zemindar's house.

(11.) *Battah* and *multa kumrao*.—The former is charged for conversion from *Sicca* to Company's rupee; the latter on account of wear and tear of the same.

(12.) *Fines*.—These are imposed when the zemindar settles petty disputes among his *ryots*.

(13.) *Police khurcha*.—A contribution levied for payment to police officers visiting the estate for investigating some crime or unnatural death.

(14.) *Junmojatra* and *rāsh khurcha* are exceptional imposts levied on occasions of certain festivals.

(15.) *Bardaree khurcha*.—A fee levied at heavy rates by a farmer taking a lease of a *mehal*.

(16.) Tax or income tax levied by a few zemindars to be reimbursed for what they pay to Government on account of this tax.

(17.) *Doctor's fees*.—This is levied exceptionally by a few zemindars on the plea that they are made to pay a similar fee to Government.

(18.) *Tantkur*.—A tax of 4 annas levied from every weaver for each loom.

(19.) *Dhaic mehal*.—A fee levied from every wet-nurse carrying on her profession in the zemindar's estate.

(20.) *Anchora salami*.—A fee paid by persons carrying on an illicit manufacture of salt.

(21.) *Hal bhangun*.—A fee paid by a *ryot* on his ploughing land for the first time in each and every year.

(22.) *Mathooroo jumma*.—A tax levied on barbers.

(23.) *Shashun jumma*.—A tax levied on *moochees* for the privilege of taking hides from the carcasses of beasts thrown away in the *bhangor* of a village.

(24.) *Punniah khurcha*.—The contribution made by the *ryots* on the day the *punniah* ceremony takes place.

(25.) *Bastoo poojah khurcha*.—A contribution made for the worship of *bastoo pooroosh* (god of dwelling-houses) on the last day of the month of *Pous*.

(26.) *Roshud khurcha*.—A contribution levied to supply with provisions some district authority or his followers making a tour in the interior of the estate.

(27.) *Nazarana*, or presents made to the zemindar on his making a tour through his estates.

In most districts there are cesses peculiar to the district. In all districts it must be said that these exactions largely prevail. It has been found that they are really almost quite universal, the only

difference being that in some places and in some estates they are levied in greater numbers and amount, and in less numbers and amount in others.

The following is a translation of a list of abwabs actually exacted from the ten or fifteen householders of a small hamlet in Nuddea, men neither of substance nor yet of exceptional poverty. The zemindari gomastahs proceeded with their peons to this village during the inundation of 1871, and apportioning on an average their requirements at three annas to every rupee of rental, demanded a benevolence of fifty-four rupees and two annas. The translation is made from a list prepared under their own hand and admitted by them in Court :—

	Rs.	A	P.
Nuzzur to the naib at the punyah, or the annual settlement of rent, when the first payment for the coming year is made ..	6	0	0
Nuzzur to the mahashoys or the zemindars (of whom there are five sharers) on the same occasion	5	0	0
Nuzzur to gomastahs at the punyah	2	0	0
Tulubana or summons fees of peons at the punyah	1	0	0
Cost of conveying bamboos to Gopainuggur	1	0	0
Tulubana of peon for the instalment of rent due in the month of Asharh	0	13	0
Tulubana of peon for the instalment of rent due in the month of Bhadro	1	5	0
Boat-hire	1	8	0
Parboni (a donation granted at the time of the poojah) to the amla of the Sudder Cutcherry	6	8	0
To jemadar of the Cutcherry	1	0	0
To halshana (a sort of under bailiff)	1	0	0
Parboni to the five zemindars	5	0	0
To Sriram Sen, head mohurrir	1	0	0
Alms to the purohit (a family priest) of the zemindars	2	0	0
Alms to the gomastahs	12	0	0
Alms to the mohurrir	3	0	0
To the zemindari burkundazes for the holi festival	1	0	0
On account of zemindari dâk-tax	3	0	0
Total	54	2	0

This case has been given at length to illustrate the usual nature of these exactions. The above sums of money were actually realized: yet the ryots did not complain. They never would have complained in this case had the zemindars allowed matters to stop at this point. But the zemindars ventured within three or four days after the realization of this amount to impose another cess of forty rupees upon this petty village as its contribution towards the marriage expenses of the daughter of one of their own number. Yet even in these straits the ryots exhausted every means of complying with the additional exaction. They sowed indigo for the planter, and they applied to him for assistance, but in vain; they besought their mahajun for the money, but fruitlessly, and only as a last resource petitioned the Magistrate for redress.

This case was especially reported by the Board of Revenue to Government. The Board observed "the case seems to prove the unmerciful manner in which unauthorized cesses are demanded; the fear of the oppressed ryots which induces them to comply with oppressive demands, of the illegality of which they may be aware and the extreme

difficulty of obtaining any adequate redress; and to show conclusively that some means should be afforded to the Government to check the rapacity of the zemindars and their agents, and to afford protection to their victims."

The whole subject of these cesses was long before the Government, and a matter of careful inquiry and deliberation. Opinions from all sources were invited and placed before the consideration of the Lieutenant-Governor. It was, however, made evident by more than one Commissioner that while the practice of realizing these cesses was open to strong reprobation, there was much to be said on both sides of the question, and that anything like peremptory interference with the long-existing practice might not be altogether beneficial to the ryots.

It has been the ryots' immemorial practice to pay these abwabs, and they pay accordingly; they pay because they have always paid, and because in the long run it involves less trouble to pay than to refuse. Upon a full review of the matter, the Lieutenant-Governor came to the conclusion that the system of these exactions was now in such universal vogue, was so deeply rooted, and so many social relations depended thereon, that it became a question whether it was desirable that Government should, by any general or very stringent measures, interfere to put a stop to them. It was at the same time made thoroughly clear that the Government, in hesitating to adopt severe or extreme measures, in no degree recognized or legalized those cesses. Illegal, irrecoverable by law, and prohibited by law, they must, it was said, remain; but it was deemed that it would perhaps be better, under all the circumstances, not directly to interfere except in extreme cases. As the people get better protected, better educated, and better able to understand and protect their own rights and position, things would, it was felt, no doubt, to some extent, adjust themselves. At present the people certainly prefer to pay moderate cesses to an enhancement of rent.

For the present, then, the Lieutenant-Governor thought that it would be sufficient to rule that Magistrate-Collectors should be careful to

Government orders

interfere in the case of any extreme oppression. In any case in which any duress or violence might be used by zemindars or others to enforce illegal cesses, the Magistrate was directed to interfere promptly, treating the matter as an extortion; and wherever in any particular estate the zemindar, by any means, might manage to collect from his ryots inordinate cesses, exceeding those sanctioned by the usages of that part of the country, it was enjoined that measures should be taken to inquire and ascertain the facts, to protect and instruct the ryots as to their rights, and generally to put a stop to such oppressions by every legal and proper means. Advantage was also taken of the opportunity offered by the publication of the Road Cess rules to make it generally known to the people that excepting that one cess, of which the burden on the ryots will be strictly limited in each district, all other cesses are illegal and irrecoverable by law.

These orders and the action taken by His Honor were entirely approved by the Supreme Government.

In Orissa, however, the case is in many respects different and worse than it is in Bengal. Not only has it been established that illegal exactions

Illegal exactions in Orissa.

have there been carried to a monstrous point, but the inquiries on this question, and the separate inquiry regarding remissions of land revenue specifically granted by Government on account of the famine of 1866 on the express condition that the rents of the ryots should also be remitted, show conclusively that, as a rule, the zemindars did not give the benefit of either the remissions or the advances they received to the ryots, but continued to collect their rents. Further, in some parts of Orissa at any rate, the Government settlement made direct with the hereditary ryots has been utterly set at naught; the Government leases have been taken from the ryots; the rents fixed by the Government officers have been increased many fold; and the main object of the extension of the settlement for a fresh term of thirty years after the famine, viz. permitting the ryots to hold on at the old settlement rates, has been utterly defeated.

For the rest, the papers showed most conclusively in the Lieutenant-Governor's opinion the utter failure

Failure of the Orissa Settlement.

of the system adopted in Orissa of making a minute and careful settlement of the rights of all parties, and then leaving the settlement to itself without the supervision of Government and the machinery of tehsildars, canoongoes, and village accountants, by which such settlements are worked and carried out in other provinces. Nowhere was the settlement more carefully made, or made in greater detail than in Orissa: perhaps nowhere were the status and privileges of the ryots so well protected in theory as in Orissa; yet we find after the expiry of a thirty-year settlement, during which no annual or periodical papers were filed, and the settlement records were in no way carried on, that this whole system of record and protection have utterly collapsed, the records have become waste paper, and the ryots supposed to be so well protected are among the most oppressed in India. The papers brought home to the Lieutenant-Governor most strongly that, so far at least, the settlement should be immediately revised. The ryots certainly ought not to be left in a much worse position than if there had been a new settlement in the regular course. His Honor thought

His Honor's views and recommendations.

the course followed in 1867 (when as an act of grace a renewal of settlement for 30 years at the old revenue was given to the zemindar) should be so far modified that a complete new record of rights should be made, and that it should be made at the expense of the zemindars, as the Commissioner proposed. Every effort, it was added, would be made to remedy the other evils that had been brought to light.

With reference to a suggestion of the Government of India that a remedy might be applied by making better provisions for the trial of suits regarding rent and exaction, the Lieutenant-Governor observed that in Orissa the rent suits were still tried in the revenue and not in the civil courts, and Sir George Campbell thought that no simplification of procedure, such as he might advocate in Bengal, would suffice to remedy the injustice which had been committed towards the Orissa ryots. If their rights were now well defined and recorded, he did not doubt that, with the

attention drawn to the subject, a reduced stamp duty, and any additional assistance that might be required, our officers could do much justice in Orissa even under the present law, in case the zemindar should attempt to tamper with the ascertained rights of the ryots. But the difficulty was that thirty-five years having passed since the settlement without any adequate protection to the ryots, with no continuance of the record throughout all that time, no decent accounts, public or private, and no security against the constant attempts of the zemindars to suppress ryot rights, there had come to be a state of things in which the ryot was too much weighted to leave it possible for him, ignorant and oppressed as he was, to assert his rights successfully by individual suits. The more the ryots had substantial rights by the theory of the Orissa settlement, and the more the zemindars were by the same settlement mere middlemen and collectors, the more it had been an object to the zemindars to obliterate the rights and lower the position of the ryots and to raise their own. They had lost no opportunity to deprive the hereditary ryots of their Government pottahs, to change their lands, to raise their rents, to obliterate the distinction between hereditary ryots and mere tenants, till the situation was such that nothing but a full inquiry by an authority vested with large powers could restore the ryots to a position in which they may be fairly expected to hold their own for the future. The Lieutenant-Governor could not but express his very decided opinion that nothing but a resettlement, restoration, and record of rights in Orissa, could cure the injustice existing there. It had already been proposed to make a cadastral survey of the greater part of Orissa in view to the working of the irrigation system, and Sir George Campbell's view was that this survey, which has already been for the most part approved, should be accompanied by an accurate record of rights, which again would be continued from year to year by the establishments of canoongoes and patwaries now being organized, and in connection with the road cess returns which have been rendered.

His Excellency the Governor-General in Council was not, however, able at once to accept His Honor's recommendations, and nothing has yet been settled.

Seeing how strongly it has been brought out by the experience of

Putwarees.

Orissa that adequate protection of the ryots is impossible unless there is some recognized record of tenures and rents and some regular system of accounts, the Lieutenant-Governor has thought it more than ever his duty to do all that he can to rehabilitate the old institution of the village accountant or putwaree. This institution is clearly indigenous in Orissa, where the old 'Bhootee' still remains in many villages. The Orissa settlement obligations comprise the maintenance of putwarees, and the Commissioner has been desired to revise and restore the system. The putwarees also survive in good preservation throughout Behar in the Patna and Bhaugulpore divisions; they have been already much rubbed up and improved, and orders have been issued to take measures for doing so still more effectually. In all North Bengal and some parts of East Bengal (especially Sylhet) putwarees are or were also common, though now the servants of the zemindars. The Regulations impose on the zemindars the obligation of maintaining putwarees

and rendering accounts, and orders have been given gradually to enforce these obligations. As the Road Cess is introduced in each district such a system becomes quite imperative.

Several allusions have been made in last year's Administration

RENT DISPUTES IN EASTERN BENGAL.

Report and elsewhere to the possibility of agrarian dissensions and difficulties in Eastern Bengal. In the year under report a serious discord of this kind burst out with some violence in the Pubna district, accompanied by considerable breaches of the peace. The subject has engaged the Lieutenant-Governor's special attention, and the question has given rise to discussions which may lead to considerable administrative changes and important measures for the determination of the rights of the various parties connected with the land.

The Pubna district is one in which difficulties and disturbances have been not unfrequent in previous times. The present disturbances originated in the pergunnah Isufshahye,

Origin and history of the Pubna disturbances.

in the sub-division of Serajgunge, in the district of Pubna. It appears that the actual rental of the estates in this pergunnah had not been raised for some years, but that the zemindars were in the habit of realizing heavy cesses of various sorts, which had gone on for so long that it was scarcely clear what portion of their collections was rent and what illegal cesses. Under the law rents can only be enhanced by a regular process after notice has been duly given in the previous year. No such notices had been served in Pubna, but during the past year the zemindars, or many of them, attempted irregularly to effect a large enhancement both by direct increase of rent and by the consolidation of rent and cesses; and besides this enhancement they stipulated that the ryots were to pay all cesses that might be imposed by Government, and that occupancy ryots should be liable to ejection if they quarrelled with their zemindar—conditions which the ryots might very properly resist. The recent inquiries with respect to illegal exactions by zemindars, and the apprehended* extension to the district

* The Road Cess Act has not been extended to the Pubna district at present.

of the Road Cess Act, under which the rental is registered, induced the zemindars to try to persuade their

tenants to give them written engagements. Some zemindars in 1872 actually succeeded in this, and the terms of the engagements granted were very unfair to the ryots. These were partially registered, but before the process was complete they repudiated the authority of the agent who had registered them. The difficulties were enhanced by disputes as to measurement, which all over Bengal have always afforded a fertile source of quarrel between landlord and tenant, there being no uniform standard and the local measuring rod varying from pergunnah to pergunnah and almost from village to village. In Pubna especially there is extreme diversity of measuring standards. All the zemindars were not equally bad, but there were undoubtedly some among them who resorted to illegal pressure and strongly attempted illegal enhancement; in the cases where the shares were much sub-divided also especial oppression was practised, and the quarrels among the sharers themselves had not a little to do with the recent outbreaks. It is the practice for

each sharer in an undivided estate to collect separately both rents and cesses, benevolences, &c., and in the estate in which the worst of the Pubna outbreaks occurred, one shareholder had sublet his share to parties who were inimical to the other shareholder—a state of things which led to much dispute.

At first, as has been said, the ryots gave way for the most part, but by February and March of the present year, one or two villages, who had not been so submissive, had gained successes in the courts. One village stood out from the first; certain suits for enhanced rent were rejected on appeal after having been in the Moonsiff's court; a ryot kidnapped had been liberated and the zemindar punished. These and other successes gradually turned the scale, and there was a reaction against exorbitant demands after the first surprise was over. In the spring the ryots commenced to organize themselves for systematic resistance. In May the league spread, and by the month of June it had spread over the whole of the pergunnah of Isulshahye. The ryots calmly organized themselves into *Bidrohi*, as they styled themselves, a word which may be interpreted into Unionists, under the influence of an intelligent leader and petty landholder, and peaceably informed the Magistrates that they had united. The terms held out by the league were very tempting, viz. the use of a very large beegah of measurement and very low rent, and it was not therefore necessary to resort to much intimidation to induce fresh villages to join. It is stated, however, that in some instances intimidation was resorted to with this object. Towards the latter end of June emissaries were sent in all directions to extend the league, and the result was the formation of large bands of villagers. Bengali mobs, as the Commissioner remarks, are easily led to believe, and to do anything that is suggested to them, and it was no doubt the case that persons who owed any private grudges, or bad characters for the sake of plunder, took advantage of the assemblies collecting to turn them to their own ends, and to commit the excesses that certainly occurred in several quarters, but of which very exaggerated reports were circulated. Serious outrages by *band fide* tenants were not very numerous, and but a few houses were actually burnt and plundered. The stories of murder and of other outrage that were current are without foundation. No one in the sub-division of Serajgunge was seriously hurt during the disturbances; no zemindar's house or principal office was attacked, and nothing of considerable value was stolen. Such cases of violent crime as did occur were due to the criminal class who took advantage of the excitement. The Lieutenant-Governor was at that time opportunely travelling in the districts of the Rajshahye division. When at Rungpore he heard that the uncomfortable relations of the ryots and zemindars in Pubna were likely to lead to serious disturbance, and he accordingly came on to Goalundo, where he met the Magistrate and fully satisfied himself of the course of action being adopted by the authorities.

Upon his return to Calcutta, the Lieutenant-Governor issued the following proclamation under date the 4th of July:—

“Whereas in the district of Pubna, owing to attempts of zemindars to enhance rents and combinations of ryots to resist the same, large bodies of men have assembled at several places in a riotous and

Government proclamation.

tumultuous manner, and serious breaches of the peace have occurred—THIS is very gravely to warn all concerned that, while on the one hand the Government will protect the people from all force and extortion, and the zemindars must assert any claims they may have by legal means only, on the other hand the Government will firmly repress all violent and illegal action on the part of the ryots, and will strictly bring to justice all who offend against the law, to whatever class they belong.

"The ryots and others who have assembled are hereby required to disperse, and to prefer peaceably and quietly any grievances they may have. If they so come forward, they will be patiently listened to: but the officers of Government cannot listen to rioters; on the contrary, they will take severe measures against them.

"It is asserted by the people who have combined to resist the demands of the zemindars that they are to be the ryots of Her Majesty the Queen, and of Her only. These people, and all who listen to them, are warned that the Government cannot and will not interfere with the rights of property as secured by law; that they must pay what is legally due from them to those to whom it is legally due. It is perfectly lawful to unite in a peaceable manner to resist any excessive demands of the zemindars, but it is not lawful to unite to use violence and intimidation."

While the attitude of Government was thus made clear and unmistakable, no time was lost in taking measures for the restoration

and maintenance of order in the district. The Commissioner had at once sent forty extra police from neighbouring districts under an experienced District Superintendent of Police. Under the Lieutenant-Governor's instructions a party of Furreedpore police, well armed, were despatched from Goulundo with the Pubna Magistrate. A body of one hundred armed police were also got together from the reserves of other districts and posted under an Assistant Superintendent at Kooshtea, to be at hand if required. The effect of these steps, and of the energetic and discreet action of the local officers, was very marked. Rioting ceased almost immediately. Many arrests were made by the Magistrate and his subordinates, in cases in which the offenders were brought to justice, and the Lieutenant-Governor at once authorized the transfer of the prisoners to jails on the other side of the Ganges. Altogether there were 54 cases before the criminal courts in connexion with these riots, and 302 persons were arrested, some of them being concerned in several cases; of these 93 were acquitted or discharged; 147 were convicted, and 62 were entered as pending when a report was last received. The charges were principally for rioting and illegal assembly, and the prisoners were punished with varying severity—from one month to two years in some cases.

Ever since the early part of July last the peace of the district of

Present situation.

Pubna has been perfectly maintained. But it cannot be said that there has been any abatement of the combinations of the ryots, and the movement has to some extent spread, but not very rapidly, through most of the Pubna district. The movement has also spread into a portion of the adjoining

district of Bograh. It slightly impinged on the borders of the Nattore portion of Rajshahye, but does not seem to have spread far in this latter, or in any other district. Nuddea, Furreedpore, Backergunge, and Dacca, are all adjoining districts, and such as, from their past history, might have been expected easily to follow in the train of any agrarian excitement, but they have remained quiet and unaffected. No doubt the ryots have on their side proposed unreasonable terms and have tendered or deposited in court rents lower than the zemindar can reasonably claim. Our officers have had great difficulty in effecting any adjustment between influenced and unreasonable parties. Still, partly by compromise, partly by the natural march of events, and partly by the shadow of the much graver calamity that is now hanging over the country, it is hoped that the Pubna difficulties may to a very great extent settle themselves for the present. Nothing has been heard of them very recently, but the subject still demands care and attention.

The Lieutenant-Governor was in constant communication with the local officers on the subject of these disturbances, and efforts have been made, by the exercise of all legitimate influence, to induce the parties to compromise their differences. It was suggested in the first stage of the disturbances that extra Moonsiffs should be provided to try the cases which it was assumed would probably be instituted between ryots and zemindars. The Lieutenant-Governor, however, was very averse to providing machinery for litigation before it was really wanted, and to pouring in Moonsiffs, Deputy Magistrates, and Deputy Collectors, as had sometimes been done in similar difficulties. His Honor's experience of the proceedings of raw Deputy Collectors, and their mode of deciding rent-suits, had strongly impressed him with the belief that, for complicated and difficult questions of this kind only really good and experienced officers were of any use. It was better to have no judge than to have bad judges. His Honor believed, and events have borne out his belief, that matters would settle themselves much more fairly by compromise than extra Moonsiffs could settle them.

More recently, the Government of India having expressed anxiety on the subject, a correspondence regarding it has taken place. The Lieutenant-Governor, on the 25th September last, expressed his view of the situation in a letter to that Government to the following effect:—

“No extraordinary official action has been taken, because the Lieutenant-Governor has not yet seen his way to take action of this kind without involving the Government in such very large questions, and in proceedings of which we so little see the end, that he has been unwilling to commit the Government without the fullest consideration. More especially has he taken this course because the Commissioner, a very steady, safe, and reliable officer, in whose judgment the Lieutenant-Governor has much confidence, has not yet wished for extraordinary measures, and seems to be hopeful, with such aid and influence as we can bring to bear, that matters may for the present to some extent be adjusted.”

Letter to the Government of India. His Honor's views of the situation.

"The local officers (especially Mr. Tayler, the Collector), who see more of present troubles, and naturally more feel the immediate difficulties, are perhaps not so sanguine, but they are doing their best to bring about an adjustment. The Lieutenant-Governor has personally addressed himself to the members of the Tagore family (who are the best landlords in the tract which is the subject of these disputes), and his endeavours have been very handsomely seconded by the Hon'ble Rajah Romanath Tagore, a near relative of the proprietors, and a man much respected. They promise liberal concessions, and the Lieutenant-Governor has directed the Sub-divisional Officer to use all his influence to induce the ryots to make reasonable terms.

"As regards the specific questions asked by the Government of India, I am to state that the ryots have not generally shown a disposition to refuse all rents, but, on the contrary, generally offer rents which the zemindars consider inadequate, and have in many cases deposited these proffered rents in court. Our officers seem to think that, as might have been expected, while the zemindars ask too much, the ryots offer too little. The combinations to resist the payment of all rents mentioned by Mr. Tayler are merely attempts to bring the zemindars to terms, by keeping them out of all rents till they settle the questions in dispute. No doubt the thing must sometimes take this form. As the Commissioner, in a letter just received, observes, all combinations on rent questions in Bengal are apt to result in withholding all rents; for as he says, 'In fact, in the very nature of things a dispute about the rate of rent must, *pro tem.*, stop all payment except through the court. The zemindars won't acknowledge a payment in the terms desired by the ryot, and the ryot won't pay it without a receipt which will support his side of the question.'

"It may be remembered that the last judicial decisions in disputed cases of the Pubna district (immediately previous to the riots) were against the zemindars, and in favor of the ryots; and it may be that the zemindars will not be in a position to claim the rents they seek to enforce till they have given the requisite notices and put themselves on the right side of the law for the following year. If they are content to take the old rents, and the ryots will not pay the old rents, they will be entitled to sue; but the truth seems to be that rents have been so irregularly exacted, according to the power from time to time of each zemindar to squeeze, rents proper and illegal cesses have been so mixed together, and especially there has been so much dispute and variation regarding the length of the measuring rods, that in the absence of all system of official record or reliable private account, it will probably be a task of extreme difficulty to ascertain what is the rent hitherto paid in each case.

"If large numbers of cases unhappily come into court, it will be our duty to provide for their decision, and in that case the Lieutenant-Governor would propose to send the best judicial officers he can find, supplying their places by others. But the matter in dispute being, as has been said, so uncertain and complicated, the Lieutenant-Governor much fears that litigation will be very ruinous to both parties, and he would certainly not anticipate or promote a resort to litigation by any measures on the part of Government before the necessity has actually and indisputably arisen.

“ The zemindars will no doubt find that when the ryots combine peaceably, they may be formidable opponents even in the courts; and meantime if all rents are withheld, the zemindars may be heavy losers. On the other hand, though the ryots may thus hold out for a time, the situation is extremely similar to that of the trades' unions in England. They pay heavily to their unions, much money will go to lawyers, and when a final decision is, after long litigation, reached, they may no longer have the money to pay, and may be sold up. It is evidently very much better for all parties if the matter can be settled by private compromise out of court, and to that our efforts are now directed. The Lieutenant-Governor has expressed his entire concurrence in the Commissioner's view, that the ryots will much injure themselves if they hold out for unreasonable terms, and they are urged to agree to fair rents.

“ Unless we are prepared to grapple with the whole of an enormous subject, there is much to be said for a policy of ‘masterly inactivity.’ From time immemorial there have been serious rent disputes in different parts of Bengal, and not unfrequently they have settled themselves to a degree which one might hardly have anticipated when things were at their worst. Only last year there were very serious rent disputes in Backergunge, accompanied by serious criminal charges. The Lieutenant-Governor was much pressed to interfere actively, and to send additional judicial machinery without delay. It was only by much firmness in doing nothing that he tided over the difficulty, refusing to anticipate litigation till it really came upon us. The result is, that without any extraordinary aid whatever the parties seem to have come to terms, and both Backergunge and the adjoining district of Furreedpore, where there were also some difficulties, are now as free from anything of the kind as any district in Bengal.

“ At present attention having been prominently called to the subject by the Pubna disturbances, there is a disposition to magnify the importance and significance of every considerable rent dispute. Such disputes must inevitably occur in so vast a country, with so complicated tenures under so loose and unsettled a system, with so little record and definition of rights. Probably such disputes are becoming more numerous and vexatious in some parts of the country, but beyond Pubna and a part of Bograh the Lieutenant-Governor does not know that they are yet more serious than disputes which have occurred any time the last hundred years. In the Dacca division there has been some difficulty and a good deal of apprehension, but when lately the Collector and Commissioner sent up a case which they considered to be a striking instance of the way in which the zemindar on his side may be prevented from getting his just dues, it turned out to be one in which a judicial decision had been passed in favour of the ryots. At the same time there is no doubt that the general tendency of the increasing knowledge and independence of the ryots, and of the general march of affairs, is to render less and less possible the old undefined and unsatisfactory relations between landlords and ryots, in which little was regulated by well-observed rule or right.

“When we come to the question of the more permanent measures to be taken to obviate, or effectively to deal with, such disputes in future, we enter upon a

Opinion as to the necessity of recording tenures and keeping public accounts.

very wide question, which probably will not be fully settled in this generation. The Lieutenant-Governor has, as he has explained, avoided anything likely to precipitate matters, not as diminishing the importance of the subject, but because of its enormous vastness and importance. He has before this expressed his belief that the relation between landlords and ryots in Bengal is a subject on the course of which must mainly depend the political position for a very long time to come. However we may stave it off in particular instances, he has no doubt that the time is approaching when it will be forced on us. If we make an attempt to settle any considerable part of it, we shall probably before long have the whole of it on our hands, and shall scarcely be able to stop till we have in fact made a settlement of Bengal, adjusted and recorded all rights and all incidents of tenure, and created a machinery for perpetuating and continuing the record of rights and keeping accounts by public officers under a system such as the framers of the Permanent Settlement designed, but their successors wholly abandoned,—a very long, difficult, and expensive, but a necessary, process it will be. The Road Cess returns may be said to be the commencement of a record of tenures and rents which we shall have to follow out to the end. They have been obtained with unexpected ease and absence of friction, but, no doubt, when we go more into the detail of rights the task will be greatly more difficult.

“It may be doubted, too, whether we shall be able to avoid some further review and adjustment of the rent law. There is no doubt great difficulty at present in determining what rents are really payable, and still more in determining the claims to enhancement of rent put forward by the zemindars. If the courts fail to deal with these things, resort is had to violence; and though the Lieutenant-Governor has expressed doubt if the disputes are yet more serious than have been known before, there certainly does seem to be among our officers an apprehension that difficulties may increase and things may come to a crisis. This apprehension has been more especially manifested in the eastern districts, in the Dacca division, and the Tipperah district. The Commissioner of Dacca seems to think that the difficulties are increasing, and that landlords have now as much ground of complaint as tenants. The passage of his last report, in which he describes the state of things, is here transcribed:—

Extract from the General Administration Report of the Dacca Division for 1872-73, paragraph 46.

“The state of feeling between ryots and zemindars is gradually attracting attention in several places from the frequency of violent collisions. Last year there was the difficulty at Tooshkhally, which had been commenced the previous year. Then there have been disputes on the Megna in Dacca, lately Mr. Wise's property, and now I hear of increased number of suits in the civil court. Suits in court of course we seek not to prevent, but the violent collisions between combinations of ryots and their landlords' *lattials*, and the fire raisings by which

the ryots on strike seek to hinder any from siding with the landlord, are subjects which will have to be considered seriously before long. The plan of operations is simple. When a village has gone on strike, the landlord singles out a few of the leading men and bribes them to his side with a false measurement with a null of length greater than that used in the village, or he throws in a few beegahs of land into his pottah under the denomination of "kyfeut" or "hajut" or "oozoree," or some other fancy name. These men then go to court ready to swear anything against the men on strike, and in a day or two some of them find their houses burnt down about their ears."

"The fire raisings and breaches of the peace have been criminally dealt with, as have been the riots in Pubna, and some of the most serious differences have been settled; but undoubtedly the liability to a more frequent recurrence of such cases remains, and the state of things is one which calls for a remedy.

"Still reasons have been given why the Lieutenant-Governor has not desired to precipitate too much direct Government action. Another important reason influencing him in the same direction remains to be stated.

"There is no doubt that the late disturbances have frightened the zemindars, and many of them would now gladly invoke Government interference and assistance. But on the other hand we also know that till the zemindars are themselves reduced to straits and difficulties, no class is so ready to protest against any interference on the part of Government as a violation of the rights of property, a breach of faith, a tampering with the permanent settlement, and what not. The Lieutenant-Governor thinks that the terms of the Regulations which established the permanent settlement amply warrant such interference, but the zemindars of Bengal are a class who make themselves heard and secure attention to their reclamations. In point of fact we have not actively interfered so long as it was only alleged that the zemindars were taking too much from the ryots. It would be hardly decorous then if it could be said that we interfere the moment that there is a suspicion that the zemindars may be getting too little. The moment they get over the present difficulty, they would return to their old cry of non-interference with the rights of property.

"Probably, then, the proper time for direct interference will be when the evils are so undoubted that we can interfere thoroughly and effectually with the general accord of reasonable men on both sides, and with the determination to carry interference to the point which will secure a permanent settlement of the relations of the various parties interested in the soil, and ensure the continued enjoyment by all of their respective rights. Whether that time has come, the Lieutenant-Governor is not yet prepared to say. Much information is now being collected; the reports coming in from the districts and divisions contain much on the subject. If the Government of India are willing that the subject should be taken up in earnest, the occasion is probably not far off."

Before this letter had reached the Viceroy another letter was received from the Government of India, in which still further anxiety was expressed. It was proposed for consideration whether it might be possible, after due warning and formal inquiry

Suggestions and proposals by the Government of India.

into the conduct of a zemindar towards his ryots, in case great oppression should be proved, to take an estate under direct official management for a time, the proper reservation of *malikana* being made to the proprietors. It was also suggested that it might be advisable to appoint a Special Commission vested with powers to investigate summarily the differences between landlord and tenant, and to settle them by awards that should not be open to appeal.

The Lieutenant-Governor replied to these proposals in another letter, dated the 3rd October last. It appeared to His Honor that although the first proposal to take estates under

His Honor's views on the proposal of taking the estates of oppressive landholders under direct management.

direct management might have a good effect in other provinces, and specially in Orissa, where he had already strongly recommended such a course, and where old-fashioned zemindars would not like to lose their power or means of exaction, and where the opportunity might be taken to restore the ryots to the position originally secured to them by the settlement, there was another aspect of looking at the case as far as Bengal was concerned. The majority of Bengal zemindars had no love for the cares and troubles of management; many of them had never seen their estates. Their great object was to derive as large an income as possible with the least risk and trouble. Hence it might be that if the only result of gross mismanagement were that Government would take charge of their estates with the tender and excessive regard for the interest of the proprietors, which had hitherto distinguished the Court of Wards' management; if the estates were to be supervised by Government officers without cost to the proprietors, rents raised, Brahmin and other lakhiraj tenures resumed, troublesome servants and agents got rid of, and the whole of the increased profits paid over scrupulously to the proprietors; if this was to be the arrangement, then, even if on the whole benefit might result in the particular instance, the Lieutenant-Governor very greatly doubted whether the measure would act as an effectual deterrent against mismanagement and oppression. The effect might rather, he thought, be the opposite if zemindars should feel that when the worst came to the worst the result would be what is above mentioned, and Government would pull them through their difficulties. Some might not like the process, but very many would not at all object.

The Lieutenant-Governor's opinion, therefore, was that a measure of this kind would not be really effectual unless the Government of India was prepared to accede to very decided measures,—to deprive the proprietors of their profits save a reasonable allowance, to inquire and record the rights of the ryots, and to secure their position against future tyranny and injustice.

As regards the proposal to appoint a Special Commission to settle claims to rent in Pubna, the Lieutenant-Governor observed that such a plan was at present much favoured by the organs of zemindars. He had some repugnance to making the concession of extraordinary machinery to the zemindars of Pubna unless a similar measure were at the same time adopted for the benefit of the ryots of Orissa. But trusting as he did that on reconsideration this last

And on the proposal to appoint a Special Commission.

measure would be also conceded, and believing that an adjustment would be equally beneficial to both parties if carried out in a manner sufficiently thorough and complete, he would gladly accept such a solution provided the terms and conditions of interference were made clear and definite.

The Lieutenant-Governor believed, speaking generally, it was certain that in the first instance the law had been with the ryots. The zemindars had not legally and regularly enhanced the ryots' rents; they had served no notices of enhancement such as the law requires prior to the present year, but they had imposed very heavy cesses in addition to the proper rent, and they attempted in the present year to make both further enhancements and a consolidation of the irregular cesses with the rent by illegal and improper means. The Lieutenant-Governor believed every one was agreed that the first fault was that of the zemindars or of some of them. Some of them certainly proceeded in an extortionate manner. The result was the union and violent outbreak of the ryots; and there had, no doubt, followed on the part of the unionists a disposition to take advantage of the situation to set up a case unfair to the zemindars, and, as has been before said, to meet the demand for too much by offering too little. It was under these circumstances that the zemindars, finding the laws against them as regards enhancement and cesses, and even their proper rents endangered by the spirit which they had evoked, called out for an equitable adjustment,—that is, for a special and extraordinary interference, to give them by a summary process all that they could equitably claim. Their own imprudence and exaction had got them into a scrape; they were frightened, and they would very naturally be glad to get fairly well out of the difficulty for the present.

The local officers had several times reported an inclination on the part of the zemindars which was a key to the difficulty, and to the cautions suggested in the latter part of His Honor's former letter. The zemindars had shown great willingness to take now the rents which they had hitherto received, "till they can sue in the civil courts for enhancement,"—a settlement which, as the local officers justly observed, would be no settlement at all. It simply meant that, having made a false step, the zemindars were willing to go back till they could proceed more effectually,—till they could get in order their legal machinery, their notices, their evidence, and their lawyer power, and then at their leisure go into court to crush their adversaries in detail, with all the advantage that money and lawyers and a skilful working of the law could give them.

The Lieutenant-Governor had no hesitation in saying that if a Special Commission were merely to give the zemindars all that they could equitably claim now, and to leave the whole question open for the future, he would entirely demur to such an arrangement as altogether a one-sided settlement.

On the other hand, if the Government of India were prepared to give the Commission the power necessary to settle the questions in dispute, so as to set them at rest both now and for a long time to come, the Lieutenant-Governor would entirely concur in such a settlement. There should be no doubt on this point. If the settlement was to be

effective, it must not only get the zemindars out of their present difficulties; it must bind them for the future. It must settle all questions of possession, measurement, and rates; it must decide who is, and who not, liable to enhancement; and it must have power to prescribe a term—a good long term—for which its adjustment is to be binding, and the zemindars are not to be allowed to disturb the rates and arrangements made. No doubt this would be a serious undertaking, but it would be an effectual and beneficial settlement if fairly and thoroughly carried out. The Lieutenant-Governor would not advocate interference unless it was carried to this point. If the Government of India were prepared to go thus far, he would advocate it. His only fear was lest the measure should be carried so far as to tide over the present difficulties of the zemindars, and should then be cut short. The Lieutenant-Governor trusted that if this line were adopted the measure would be made clear, thorough, and complete, so as to leave no opening for its frustration.

There was, it was added, one important change of late years which must have a very material effect upon the landlord and tenant question, and which was now being carefully watched by Government, viz. the transfer of rent suits from the revenue courts to the civil courts, a measure carried out by the late Lieutenant-Governor in 1870. One Commissioner puts it strongly that under the present system the zemindars get more law and less rent, and our officers generally seem to think that they really have some ground of complaint. The change is unpopular with the landholding class in two ways,—the recovery of rent is a much longer and more costly process than before, and the rights of the ryots seem to be more carefully and scrupulously dealt with. In fact the tendency of the decisions of late years has been much more in favor of the ryot than previously. On the other hand, among a simple people, unaccustomed to fight in the courts, the difficulties and expense of procedure would probably more than counterbalance this advantage when the ryot is the complainant. It seems to be so in the Patna division; but in parts of the country where, as in Eastern Bengal, the ryots are experienced in litigation and have a strong power of combination, they do not complain of the present state of things. The cry for retransfer to the revenue courts is distinctly a zemindar's cry; and though it has some good ground, in so far that the realization of undisputed rent is now unduly difficult and expensive, the Lieutenant-Governor cannot say that he thinks the ryots should be handed back to any courts less scrupulous regarding the provisions of the law in their favor.

In truth the rent question is, as the Lieutenant-Governor has expressed himself, a question of extreme difficulty, and after all only a part of the whole revenue law of Bengal which in His Honor's opinion must be consolidated and reconsidered. His principal hesitation on the subject of consolidating the law had been caused by the fear that in the process the zemindars might manage to get rid of some of the old landmarks of the permanent settlement so far as they fixed a limitation to the rights, and expressed the duties, of landholders. But keeping

scrupulously in view that the essentials of the laws of 1793 must be very carefully reproduced, he would cause the consolidation to be carried out. The Lieutenant-Governor is not prepared to recommend the retransfer of rent suits till the whole of the relations between landholders and ryots in Bengal are reconsidered in the broadest way.

Another subject of importance has also been recently under the consideration of Government, in connection with the rent disputes and

Evils arising out of the joint management of estates.

the many social and political difficulties resulting from the way in which land is now held in Bengal. It was brought to the notice of Government that, as a consequence of the practice of sub-dividing and subletting, each tenant had now very commonly to pay his rent to "two or many more than two masters." The hardships and harassment to which the practice of shareholders collecting separately subjects the tenant, had also frequently come under His Honor's observation in different shapes, and, as has been noticed, a case of the kind was one of the principal causes of the Pubna disturbances. The Lieutenant-Governor has repeatedly observed how nearly impossible it is for landholders to do their duty when their estates are split up among so many undivided and overlapping interests. The Lieutenant-Governor therefore requested the Board of Revenue to consider whether some remedy

Proposal to appoint a representative manager.

should not be applied by legislation, and suggested the possibility of reverting to the rule of the permanent settlement, under which the proprietors of a joint undivided estate were required to elect a sarbarakar or manager, who should have the exclusive management of their lands during the continuance of his appointment. On this the Board consulted the Commissioners and local officers, who were "very unanimous in deploring the evils and hardships of the present system;" but they were not generally hopeful as to the probable result of the remedy proposed, or of any other remedy.

That the Government, however, is thoroughly justified in insisting on the appointment of representatives of the shareholders, if that course should appear to be for the benefit of the community at large, is evident from the fact that a provision requiring them to do this (Section 23, Regulation VIII of 1793,) was among the fundamental provisions of the permanent settlement. An arrangement of this kind has been carried into full effect, and is now in universal use in the North-Western Provinces, Oude, and Punjab, where, without it, society would fall to pieces. The effect of the Hindu and Mahomedan law of inheritance and other causes are such that there are very few estates held by single owners, either in Bengal or in other provinces. At the same time it must be admitted that, as things are now situated in Bengal, there are considerable difficulties in the way.

Difficulties in the way.

This was felt as early as 1805, when, at the instance of many landholders, the provision above quoted was repealed. Looking at the relations which so often exist between coparceners in Bengal, it is to be expected that it may often be found difficult for them to agree in selecting one of their number or any common agent to deal with their tenants on behalf of all. The preamble to Regulation XVII of 1805, which Regulation repealed the

rules of the settlement law requiring the appointment of a joint manager, sets forth "the reluctance manifested generally by the proprietors to elect a manager under those rules;" but in the correspondence which led to the passing of the repealing Regulation, the question is viewed from the zemindar's side only,—its bearing on the tenants is not even alluded to.

It seemed to the Lieutenant-Governor that probably the necessary remedy might best be given in the shape of a law, similar to the original law of 1793, giving authority to the District Office, upon application made by the shareholders or tenants of any estate, or otherwise, when he finds such a measure necessary for the peace of the district and the due protection of the tenures, to call upon all persons (whatever may be the degree of their tenures) who are entitled to collect fractional shares of rent direct from the cultivating ryots, to appoint one of their own number to represent the whole body in their dealings with the ryots, or to appoint a joint agent for that purpose. In case of default to nominate jointly, it seems unavoidable to vest the powers of appointing a manager with the Collector.

Upon the whole question the opinion of the Lieutenant-Governor has been made public, and the views and suggestions of the representatives of the landed classes have been invited. The fact is that in this and many other subjects, as has been pointed out, the land revenue law of Bengal requires revision, and a proposal on the subject will probably be submitted shortly.

Another question which has been raised is whether in estates held in undivided tenure, according to the custom of the country, some right of pre-emption should not be secured by law to the shareholders in case of sale by one of their number, so as to prevent the interference of a stranger in family and social arrangements depending on joint tenure. There is no doubt that much hardship and discord has been caused by cases in which the discontented holder of a petty share, or still more commonly the disappointed claimant to a share of which he has no possession, has sold the rights or claims in litigation to a strong-handed stranger.

Proposed right of pre-emption to shareholders.

CHAPTER II.

RELATIONS WITH FRONTIER ESTATES AND TRIBES.

ADMINISTRATION OF TERRITORIES EXEMPTED FROM THE ORDINARY LAWS,
AND OTHER MATTERS BEYOND THE SCOPE OF THE ORDINARY CIVIL
ADMINISTRATION.

NEPAL FRONTIER.

MENTION was made in last year's report of the steps taken to redemarcate the boundary between the districts of Bhagulpore and Purneah and the state of Nepal. Owing to an unfortunate misapprehension on the part of the officer deputed to carry out this duty, some eight miles of this boundary were afterwards found to have been erroneously laid down, and it will be necessary to have the error rectified by professional survey during the ensuing cold season. It has been settled to plant a substantial bamboo hedge along the whole line, and to keep a space on either side of this clear, that there may be no excuse for encroachment in future, either by our own subjects or those of Nepal. All missing pillars have been re-erected, and very shortly this troublesome question of the Nepal boundary will, it is hoped, be finally disposed of. The border Magistrates will be held responsible for the maintenance of the pillars and the clearance of the space reserved along the bamboo hedge.

Though so far as Bengal is concerned our own relations with Nepal have been undisturbed and friendly, rumours have been frequent throughout the year that Nepal and Thibet were drifting into a state of almost open hostility. It was alleged that the Nepalese envoy at Lassa had been insulted, and Sir Jung Bahadoor had sent orders for his withdrawal and demands for apology and explanation. No very authentic details have as yet reached this Government, but there is little doubt that something has disturbed the amicable intercourse which has existed between Lassa and Katmandoo.

SIKKIM AND THIBET.

During a short visit to Darjeeling the Lieutenant-Governor was visited by the Maharajah of Sikkim, who was accompanied by his young brother, styled the "Chota Rajah;" by his sister or cousin, Seringpati, a young lady of 20, as yet unmarried; and by his brother Chongzed Kabboo, who is in fact his prime minister or manager, and by whom the whole business of the state appears to be transacted. A numerous

following of Lamas and Kazies, and a motley crowd of Lepcha and Bhuteas, some of them armed with very rusty muskets, completed the party, which was lodged and entertained at Government expense.

The Sikkimputi himself is an elderly man of apparently reserved character. Those about him endeavour to explain his want of communicativeness by ascribing his manner to religious abstraction, the effect of excessive devotion to the duties of a Lama. He is treated with much respect. The young boy, the "Chota Rajah," is a quiet youth, who bears himself with propriety in public, and is attentive to what is going on about him. There is some possibility of his being sent in with a younger relative for education at Darjeeling. As the family is too poor to afford the necessary outlay very easily, while the advantage of having a young man with a good English education and bound to us by ties of obligation, holding an influential position in Sikkim, cannot be over-estimated, the Lieutenant-Governor has recommended to the Government of India that if they come, they should be educated at the cost of Government. The lady, Seringpati, was one of the most interesting persons in the group. Perfectly free from affectation and any ideas of seclusion, she appeared on all public occasions, visited the sights of the place under the escort of the Deputy Commissioner and other officials, and expressed the most naïve delight with every novelty that was brought to her notice.

The prime minister, Chongzed Kabbho, is however undoubtedly the leading spirit in Sikkim at the present time. Of easy manners and address, he seems to take up every subject that comes before him with remarkable intelligence, and is obviously a man of great natural powers and of predominating influence among his countrymen. The only other member of the party whom it is necessary to single out was the Lama of Pomiongchi, the leading member of the Buddhist hierarchy in Sikkim, whose tall, commanding form and imposing archiepiscopal head-dress made him a conspicuous object even among the crowd of picturesque and Chinese-looking Lamas and Kazies who surrounded the Sikkimputi on all public occasions.

The Lieutenant-Governor received the Maharajah in open durbar, under the regulation salute of 15 guns. Presents of no very great value were exchanged, and the Lieutenant-Governor expressed to the Maharajah the pleasure with which he would convey to His Excellency the Governor-General news of this visit, and the hope that it might result in the greater development of trade, in more familiar intercourse between the two countries, and in much benefit to Sikkim.

On the following day His Honor received privately the minister Chongzed. From him it was ascertained that while traders from Cashmir and Nepal are allowed free access to the Thibetan markets, few Hindustani or Bengali traders venture to attempt the journey, and it is doubtful if they would ordinarily be allowed to cross the passes. It is certain that no European traveller would be allowed by the Thibetan authorities to cross the frontier by the Sikkim route. Chongzed affirmed that this was due solely to the existence of orders to that effect from the Court of Pekin; that the local officials would, if they dared, gladly facilitate a direct trade; and that even now a considerable traffic is carried on through Sikkim by Thibetan, Lepcha,

or Blutea traders. It further appeared that they have discovered mines of copper and iron in their territory, but it is doubtful, from Hooker's descriptions, whether any minerals of importance are to be found in these hills. Much anxiety was expressed that the Government should guarantee the state from any attempts of its rough neighbours in Bhutan or Nepal. It seems that numerous immigrants from the latter state have taken up lands in Sikkim, and there was a doubt as to whether they would prove quiet and peaceable settlers or the reverse. The Sikkimputi has no considerable armed force to maintain order. Any duties of police are performed by a class of ryots like the Orissa paiks, who hold their lands on condition of such service, but they have no discipline or skill in arms, and probably only turn out when they feel so inclined. Two hundred muskets were made over to the Durbar by our Government years ago, but there is no one in the country who understands keeping them in order, and the odd-looking figures who formed the Maharajah's body guard had obviously no idea whatever of handling these weapons, which looked, moreover, more likely to be dangerous to the bearers than to any possible enemy. The Sikkimputi was assured that the agricultural Nepalese are a quiet, good, and industrious people, whose settlement, both in Darjeeling and Sikkim, is in many respects desirable.

One object of the Maharajah's visit was to ask for an increase of his allowance from Rs. 9,000 to Rs. 12,000 per annum, on the ground of the general poverty of the state and the loyalty of its relations to us. This request the Lieutenant-Governor, for reasons to be explained below, thought it desirable to support.

On the same day as that on which Chongzed Kabboo had his interview, the Lieutenant-Governor distributed small presents to twenty-two of the leading Lamas and Kazies, and addressed them briefly, exhorting them to support the Maharajah in his peaceful management of his territory, to remember that he and his people were bound to show loyal friendship to the British Government, and to do what in them lay to discourage intrigue and turbulence, wherever these might crop up. They were assured that the Maharajah had the full friendship and support of the British Government, and would continue to have it as long as he maintained loyalty and good government. It is right to mention that the Maharajah specially requested that this word in season might be spoken to his officers. The Maharajah left Darjeeling well satisfied with his reception, and at parting undertook to send into Darjeeling a few young Lamas to learn vaccination and simple medicine from the Civil Surgeon.

A main reason which inclined the Lieutenant-Governor to welcome the Sikkimputi's visit was that it appeared to His Honor important to seize every opportunity of opening up and developing the trade with Central Asia, and to secure, by increased frequency of communication with Sikkim, more full and accurate knowledge of what goes on in the hills. He therefore gave the Sikkimputi to understand that he would commend his application to the favorable notice of the Government of India on condition of his honestly and energetically furthering the wishes of Government in respect of these objects. The Government of India has since agreed to this

proposal, and it has been settled that after the rains Mr. Edgar, the Deputy Commissioner of Darjeeling, should visit Sikkim and make himself thoroughly acquainted with the present state of things there; the actual condition, extent, and prospects of the trade with Thibet; the best line for a road to take, and the advisability of opening one out; and all other matters likely to enable Government to act with certainty on this important question. The Sikkimputi has undertaken to receive and assist Mr. Edgar by every means in his power; the local officers of the state have pledged themselves in like manner; and the Lieutenant-Governor has no doubt that in Mr. Edgar's hands such a mission would be eminently successful.

The Lieutenant-Governor had also suggested, for the consideration of the Government of India, that a survey of Sikkim is for many reasons very desirable for geographical and scientific purposes. Under clause XIV of the treaty, the Sikkim Government are bound to allow this if we desire it, and His Honor ascertained during his personal intercourse with the Sikkim authorities that they would be ready to give cordial and active assistance to any officers deputed for this work.

THE TRADE WITH THIBET AND CENTRAL ASIA.

Both the Government of India and Her Majesty's Secretary of State have repeatedly expressed the great interest which they take in the subject of trade with Thibet and Central Asia, and the wish that no favorable opportunity should be neglected of promoting the development of commercial intercourse between British India and those trans-Himalayan countries which are at present practically closed to us. The question has also been lately exciting interest in England, and it was stated in the public prints that His Grace the Secretary of State had favorably received a deputation which waited upon him to discuss it. In last year's Administration Report a sketch was given of the position of this question. All the authorities were then agreed that until the Emperor of China came of age it was useless to try to procure any modification in the exclusive policy of the Court of Peking, under pressure of which Thibet was closed to British commerce. The majority of the Emperor seemed to the Lieutenant-Governor to afford now a favorable opportunity of re-opening the matter.

Thibet is a perfectly civilized and well-regulated country, with which our hill people are in constant communication, and which they know about as well as Englishmen know France. When Europeans go to the frontier and try to cross it, there is no display of violence or disturbance. They are civilly turned back with an intimation that there are orders not to admit them. All our inquiries, and the experience of the few travellers who have got to its borders or inside its cities, lead to the belief that the Thibetans themselves have no objection to intercourse with us. The fact appears to be that the prohibition to intercourse with Thibet which now exists is simply part of the Chinese policy of exclusion, imposed on the Thibetans by Chinese officials and enforced by Chinese troops stationed in Thibet.

Personally, and looking at the matter from a Chinese point of view, the Lieutenant-Governor could not wonder that they should wish to keep out Europeans, and to avoid the complications which they have

had with foreigners in China, where so many European adventurers are seeking to exploit a rich country with a somewhat turbulent native population. But in Thibet there is not wealth enough to attract many adventurers; there is room only for a moderate and legitimate commerce; and among a people so good and well-regulated as the Thibetans, His Honor believes there would be no such difficulties. If the road were opened, it would be used only by fair traders and by responsible Government servants, or travellers, under the control of Government, going in search of information or for change of climate.

Now that the Emperor has come of age, the Lieutenant-Governor thought we might take steps to press for an order of admittance to Thibet. The most emphatic declaration might be made that, having our natural and best boundary in the Himalayas, we could not, and would not under any circumstances, encroach on Thibet. It might be pointed out that, looking only to mean considerations, there is not enough there to tempt our cupidity, and that the physical obstacles in the way would render it impossible that we should desire to send troops over the mountains. We might offer to arrange that none save hillmen or classes domiciled in Thibet should be allowed to go in without a pass, which would be given under such restrictions that Government would be responsible for the conduct of the holder. He strongly urged that Her Majesty's Foreign Office should now seriously press the authorities at Pekin to allow a renewal of the friendly intercourse between India and Thibet which once existed.

An examination of all that is known regarding the various routes into Thibet and the countries lying between British India and the Thibetan capitals of Lassa and Digarchi led to the conclusion that by far the easiest routes into Thibet were through the Sikkim passes. We are now making great efforts to promote trade and intercourse with Yarkund and neighbouring countries, which are only reached by a very long journey of several hundred miles over a succession of passes 19,000 feet high. But we may reach civilized Thibet by a route of about 100 miles (including twistings of a hill road), and over a pass not more than 12,000 or 13,000 feet high.

There are other known trade routes to Lassa—one by Dewangiri, the post on the frontier of Kamroop in Assam taken by us from the Bhutanese; another from the Durrung district of Assam *via* Towang, the Bhutea Rajahs of which place are quite independent of Bhutan Proper, and on most friendly terms with us. It is the Lieutenant-Governor's intention to open a road to Dewangiri, and to cultivate more intimate relations with the Towang Bhuteas themselves directly subordinate to Thibet.

East of the Towang pass we have Dufflas and Abors, through whose country we cannot pass, and Huc's account of the journey from Lassa eastward shows that there is no country there worth getting to even if we could. But again at the head of the Assam valley the Mishmi country communicates with Batang, a dependency of the Szechuen province of China. The fact of this communication existing has been repeatedly reported, and at the last Sudia fair a Chulkatta Mishmi appeared dressed in a thoroughly Chinese costume, inquiry from whom elicited the information that there was considerable

traffic between the eastern Mishmis and the Lama country. Twenty-four days' journey with loads was given as the distance between Sudya and the Chinese plains *viâ* the Mishmi's village, and the first place of any importance under Chinese government was styled by him Aloo-poo or Alopoh. The Lieutenant-Governor has not, however, been able to identify this town. The Mishmis come down freely to the Sudya fair, and it is probable that in this direction we could easily get to Batang if allowed to enter by the Chinese. Indeed our emissaries have been to the Thibetan frontier, where they were stopped and turned back.

There can be no question that if these routes were opened the means of carrying on trade would be abundant, and Leeds, Manchester, Birmingham, and other English goods, might be sent across, as well as Indian indigo and Darjeeling tea, in large quantities; while we should get back much wool, sheep, cattle, walnuts, Thibetan cloths, and other commodities. Apart from trade also it would be an enormous advantage to our officers and the many European residents in moist Bengal to be able to visit and travel in high and dry Thibet. The part nearest to Darjeeling, the Choombee valley, would be the best of all for a change of climate, and being a mere tongue of Thibetan territory, free entry there would least excite the jealousy of the Chinese. While Pharee, at the upper end of the Choombee valley, is very high and dry, and the pleasant country on that side is further north, the Choombee valley itself is somewhat lower, and though protected by the Snowy Range from the monsoon, it has showers enough to give it trees and flowers and corn and grass, and must be by all accounts a very agreeable residence.

Besides permission from China to enter, one more thing is wanting for intercourse by the Sikkim route, *viz.* a road. Once in Thibet the routes are comparatively easy, and there is little difficulty in getting along. But this side of the passes, though the way is not long and not at all specially difficult, there are the usual drawbacks to Himalayan travel, and beyond our existing road to Dumsong the traffic is confined to Bhuteas' backs. Dumsong is about 50 miles from the nearest passes, and most of the route between lies in Sikkim. Under the treaty with Sikkim, however, "in the event of the British Government desiring to open out a road through that country with the view of encouraging trade, the Sikkim Government will raise no objection thereto, and will afford every protection and aid to the party engaged in the work. If a road is constructed, the Government of Sikkim undertakes to keep it in repair, and to erect and maintain suitable travellers' rest-houses throughout its route. Moreover, if the British Government desire to make either a topographical or geological survey of Sikkim, the Sikkim Government will raise no objection to this being done, and will afford protection and assistance to the officers employed on this duty." Our present relations with Sikkim are such that the Lieutenant-Governor has felt warranted in assuming that a route which passes through that country is practically entirely in our hands. The Sikkim Durbar have manifested such a generally friendly spirit, and such a genuine willingness to meet the views of Government on this and kindred points, that there can be no doubt they see clearly on which side their own interest lies in this matter.

Along the northern and eastern frontier of Sikkim there is a constant succession of routes leading at greater or less altitudes into Thibet by the various passes through that southerly bend in the great range which embraces the Choombee valley, and which is seen facing Darjeeling to the east and running north and south in a well-defined line. The most southerly pass of which we have any definite information is the Jelep-la, about 45 or 50 miles from the Darjeeling post of Dumsong (formerly a sub-division). It is stated to be about 13,000 feet high. This and another neighbouring pass to the north (the Gnatui-la) are rarely interrupted by snow for many days together at any time of the year. Through them would probably run the most direct and easiest route to the Phari Valley. The next pass is the Yakla, about 14,000 feet high, and after that the Chola, nearly 15,000 feet high, but which is wholly bare of snow in November. Through the Chola runs the direct route from Tumloong, the capital of Sikkim, to Chombee. Hooker reached Chola on the third day's march from Tumloong, and Choombee is not far on the other side. North of Chola again lies the Tankrala, which is 16,083 feet high, and is said to be the most snowy pass in Sikkim. It is also difficult of access and unsuited for traffic. At the head of the Lachung, the eastern branch of the Teesta, in the north-east corner of Sikkim, is the Donkiala, lying under the great Peak of Donkia and above the Thibetan lakes of Cholamu. The altitude of this pass is 18,466 feet. A little further to the west lies the last of the Thibetan Sikkim passes, Kongralama, 15,745 feet high, at the head of the Lachin, the western branch of the Teesta. The Donkiala and Kongralama are chiefly used by Thibetans, who bring their cattle to graze in Sikkim, and by the inhabitants of the Lachin-Lachung valleys, who twice a year carry wood into Thibet and bring back loads of salt in return.

The Himalayas in this quarter are not nearly so rocky as, and are much easier to work for roads than, the Western Himalayas. There is an easy and nearly level track from near the proposed terminus of the Northern Bengal Railway up the valley of the Teesta to the Rungeet, along a great part of which a pony can now be galloped, while a portion which had fallen into temporary disrepair is being re-opened. Then there is a road from the lower Teesta to Dumsong, and thence to the Jelep-la pass, but that route involves a good deal of up-and-down before reaching the passes, and it may be better to carry the road up the Teesta to its junction with the Rongchee, and thence along the latter stream round the foot of Dumsong till it reaches the sources of that river near Jelep-la. Or it may be found better to go even further up the Teesta and thence up some other valley or spur to the passes. The Teesta's tributaries from the east run down from the Thibetan passes or their neighbourhood, and the spurs between the tributaries run up to the mountain range between the passes. A well-designed road up the Teesta valley, and thence along a side valley or spur, would reach the passes by a varied, but nearly continuous ascent. Say we come 50 miles up the Teesta valley by an ascent of from one in 100 to one in 50 till we reach a height of say 3,500 or 4,000 feet. Thence there would be an ascent of about 9,000 feet to the passes. Fifty miles of road with that ascent, and a slight descent on the other side, would bring us into the Choombee valley.

The Lieutenant-Governor has urged on the Government of India his belief that the time has come when we may fairly press upon the Chinese Government the abandonment of its policy of exclusion so far as Thibet is concerned, and he feels convinced that by Sikkim, by Towang, and possibly by the Mishmi country, we have to our hand routes of fairly easy access into Central Asia, which it would take but a little time to make avenues of a prosperous trade. At any rate he is anxious that the Sikkim routes should be examined, since even if the trade were not thrown open to us directly, any radical improvement of the road must lead to a considerable increase of indirect traffic, and perhaps by bringing the Thibetans down to the plains pave the way for a more liberal policy in the future.

BHUTAN.

It was stated in last year's report that arrangements were being made for the demarcation of the boundary between Assam and Bhutan. Lieutenant-Colonel Graham, the Deputy Commissioner of Durrung, was appointed Special Boundary Commissioner for this duty, and in company with Lieutenant-Colonel Macdonald of the Revenue Survey succeeded in carefully demarcating by masonry pillars the whole of the frontier line from the Monas river on the west, where the demarcation of the Cooch Behar portion of the boundary terminated, to the Deosham river on the east, where the territory of Bhutan Proper merges in that of the Towang Bhuteas, a length of 69 miles as the crow flies. The Bhutan Durbar failed, in spite of repeated invitations, to depute any official to watch the demarcation; but this was not a matter of much consequence, because the treaty specifically reserved to Government the right of determining the boundary, and the principles upon which it has been adjusted are fair and liberal to the Bhutanese. The whole of the hills has been made over to Bhutan, so much of their roots being here and there taken as was required to give a reasonably straight line of boundary. The only exception to this rule was at Dewangiri, where, under the cession made after the Bhutan war, the line runs into the hills so as to bring that strong position and mart into British territory. On arriving at Dewangiri Colonel Graham found that, notwithstanding its having been taken over by us formally after the war, and notwithstanding the recent visit paid to it by the Deputy Commissioner of Kamroop to assert our authority and collect house-tax, the place was to all intents and purposes in the hands of a zinkaff or officer of the Tongso Penlow. This zinkaff had been making collections from the petty traders of the place, and went so far as to declare that he would allow no boundary pillars to be put up. He was told that the whole of Dewangiri was British territory, and that the pillars would certainly be put up, while he and his government would be held responsible if any attempt were made to remove them. Upon this all active opposition was withdrawn, and the pillars were erected and their object fully explained to the residents. Under the orders of the Supreme Government maps of the whole boundary, with the British territory marked clearly in red, and the names of places set out in Bhutea, have been forwarded to the Central Government of Bhutan, with injunctions to observe the line now shown them very carefully

for the future. They have also been told that the sums levied by their zinkaff from the Dewangiri traders will be refunded to the traders and deducted from the next annual payment due under the treaty to Bhutan. Any further encroachments will be seriously visited and lead to stoppage of the treaty payment altogether.

As before noticed in connection with the subject of Thibetan trade, Dewangiri was at one time a mart of considerable importance, and it is the Lieutenant-Governor's wish again to make it such. Surveys, with a view to a road along the easiest pass leading up to it, are about to be undertaken, and when such a road is once opened a small guard can be left there with safety throughout the year to mark unmistakably the fact of British possession, and to protect the trade which it is hoped will soon again spring up there.

We have very little information as to the internal politics of Bhutan, and though rumours have from time to time reached us of dissension between the Deb Raja (once Tongso Penlow) and the other Bhutanese notables, we have no precise knowledge of the actual state of things. It has also been reported that there is some ill-feeling at present between Bhutan and Nepal owing to the refusal of Bhutan to enter into any alliance with Nepal against Thibet. Sikkim, too, has complained that Bhutan from time to time disturbs her tranquillity by putting forward spurious incarnations as candidates for the lamaship of a monastery in Sikkim, but there is no reason to believe that Bhutan has the means or the will, in its present divided state, to do any positive harm to its neighbours.

ASSAM TRIBES.

After completing the demarcation of the frontier of Bhutan Proper, Colonel Graham proceeded to lay down the boundary of British territory along the northern face of Durrung westwards, a task the importance of which has long been recognised by Government, and which forms an essential preliminary to any settled scheme of dealing with the wild tribes of the Sub-Himalayan range. From the Deosham, where Bhutan Proper ends, Colonel Graham succeeded in demarcating a boundary line as follows :—

1. Along the frontier of the Towang Bhuteas who owe allegiance to Lassa, east to the Rowta river;
2. Along the frontier of the Char Dwar Bhuteas from the Rowta to the Ghabroo river;
3. Along the frontier of the Akhas from the Ghabroo to the Desseraï.

The lateness of the season brought the survey to a termination just as the frontier of the Duffla tribe was reached.

Representatives of all the tribes concerned were present during the boundary operations on this part of the frontier. Both the Towang Bhuteas and Akhas readily accepted the line proposed. In the case of the former some superior Thibetan officials came down, and after inquiry and explanation agreed to all Colonel Graham's suggestions. The Char Dwar Bhuteas were more unreasonable, putting forward claims to lands in the plains over which it was well-known they had never exercised any rights. Colonel Graham therefore, rejecting their demands, laid down a boundary on the same principle as elsewhere.

All along the frontier he found large parties of hillmen come down to trade and graze cattle. No villages are seen in the vicinity of the plains. The tribes bring down from the inner hills gold dust, blankets, rocksalt, yak-tails, musk, and chillies. But they value their connection with the plains mainly on account of the grazing found there. Annually after the grass jungle is burnt in December cattle in great numbers are driven down. The only anxiety felt by the hillmen, as they explained to Colonel Graham, was lest the boundary line was intended to bar their herds from grazing. The Lieutenant-Governor, in concurrence with the local officers, considers that it would be most impolitic to interfere with this privilege. The hillmen must, however, be made to understand that it is a privilege, and not a right; and that they are allowed to retain it only on condition of good behaviour. In this way it becomes a most valuable means in our hands of securing the peace of this frontier.

It is intended to carry forward the work of demarcation along the Duffla frontier during next cold weather. Our relations with that tribe have, however, been very unsatisfactory during the past year, and it will be necessary probably to combine with the survey operations measures of a less amicable character.

DUFFLAS.

The Dufflas along the Durrung and North Lukhimpore borders had not for many years past given much trouble, though the report for 1870 described an outrage committed for private reasons by one hill Duffla upon another man of the same tribe living on the plains. Many Dufflas have settled as colonists in our territories, and a few even occasionally work on tea gardens. The tribe of Tagin Dufflas living in the hills on the borders of East Durrung and part of Lukhimpore have, however, this year placed themselves in an attitude of positive hostility to the Government, and perpetrated a raid which, though directed against Duffla colonists in the plains, and not against the Assamese, was far too serious to be overlooked. On the night of the 12th February 1872 the village of Amtolla, two miles north of the Gohpore police station of Durrung, and seven miles from the foot of the hills, was attacked by a body of two or three hundred hillmen. The village was sacked, two persons—a man and a woman—who resisted the being tied up, were murdered, and 44 persons—men, women, and children—with their property, were carried off. The villagers who were taken away were all western Dufflas (not Tagins), while a few settlers belonging to the Tagin Dufflas were left unharmed—a circumstance which tended to confirm the belief, since supported by ample evidence, that the aggressors were chiefly men of the Tagin tribe. The guard at Gohpore made an attempt to follow the raiders, but did not succeed in overtaking them. Orders were, however, sent to reinforce the district police with troops. All the Duffla passes to the east of Durrung and along the Lukhimpore frontier were blockaded, and payment of the allowances annually made to the Tagins was stopped. Spies sent into the hills traced the raiders to their homes, and by their reports and the statements of one or two captives who escaped, the position of their villages has now been pretty well ascertained. The cause assigned

for the outrage is a curious one. The hillmen had, it seems, been much troubled by an epidemic, which they believed to have been imported from the plains. They called upon the Dufflas of the plains to compensate them for the loss they had sustained in children and adults from the disease; and because the Dufflas of Amtolla declined to meet their wishes, they came down to recoup themselves by seizing them all as slaves. The Tagins refuse to surrender the captives save on ransom paid, and even threaten further raids if the blockade is maintained. The blockade has of course been strictly maintained, and it is believed that this exclusion from all trade with the plains has been felt by the hillmen, though as yet they show no signs of giving in. The Lieutenant-Governor, after personal consultation with the Deputy Commissioner, Colonel Graham, has seen reason to hope that strict maintenance of the blockade during the ensuing cold weather may possibly bring them at last to terms. Precautions will be taken against any further raids; but it may be necessary to adopt more active measures of reprisal. The Duffla hills are not specially difficult of access. Elephant-hunters from Assam have been several days' march within them, going up one way and returning another. The villages where most of the captives are, are but four or five marches off, or at most perhaps seven marches. The tribes have no unity of organisation; every village is separate, and if one is hostile, the next may be friendly. They have not fire-arms, and for some years, as above remarked, they have not shown themselves hostile to our Government, but have yearly drawn allowances for loss of their practice of making collections from the Assamese ryots of the Dwars or passes, and have done much profitable trade with our bazars and markets. There is reason to hope that a small expeditionary force might bring the contumacious to terms, and that the effect of such a settlement would be lasting. The Lieutenant-Governor has, however, rather shrunk from recommending a regular expedition owing to the chronic difficulty which exists in Assam in getting coolly carriage for troops. He has stated to the Government of India his belief that we ought to have for service on the North-Eastern Frontier a permanent cooly corps to be available for expeditions of this kind, which we must expect occasionally until the frontier difficulties are finally solved and the tribes come to find their interest in peace and trade. Such a corps could always be usefully employed in making roads when not required for hill service. Meantime what His Honor has proposed is that we should place on the Duffla frontier next cold season a sufficient number of troops and police to establish a rigorous blockade, and furnish, if called for, a small expeditionary force. Colonel Graham, the Deputy Commissioner, would be allowed, if he saw a good opportunity, and other means had failed, to make a dash into the hills with this force and with the elephant and local cooly carriage available. He would, while looking out for this and watching the blockade, superintend also the operations of the survey, which should carry eastward along the foot of the hills the line of demarcation successfully settled along the Kamroop frontier, so as to mark distinctly for the future the territory which we claim as ours, and within which we shall refuse to permit any outrage or encroachment.

That the blockade will probably secure the surrender of the captives, we may perhaps be encouraged to hope, from the fact that another Duffla village to the north of Lukhimpore, which had carried off in similar fashion last year one or two Dufflas of the plains, has lately restored them, when it found that Government insisted on viewing such conduct as a grave offence. In this instance the local officers had, however, been fortunately able to capture one of the offenders, and held him as hostage till his village sent back the captives.

MISHMIS, ABORS, ETC.

The other tribes with whom the Lukhimpore authorities have to do have been quiet throughout the year. The Sudya Fair was held on the 10th February, and was well attended. The Chulkatta Mishmis, who had for some years past been prohibited from entering the plains as a punishment for their frequent raids, were again, on their urgent prayer and on promise of good behaviour, permitted to come down. About 1,000 of the tribe took advantage of the permission and brought for sale India-rubber, wax, skins, and other produce, which they bartered for cloth, brazen vessels, wire, and opium. They behaved themselves quietly, and the only incident of a disturbing character was the murder by one of them on the way home of a worn-out Naga slave whom he had brought down to sell, and did not think it worth while to take back when he found that no one would buy him. The murderer was at once given up by his tribe; and as it appeared that he was perfectly unconscious of having committed any offence, he was after a time let off with a fine, his tribe undertaking that no such violation of our laws should occur again. The Mishmi tribes are those in direct communication with Eastern Tibet and China, and allusion has been already made to their traffic with China.

Besides Mishmis, Abors, Miris, Singphos, and Kamptis, attended the fair. The Singphos and Kamptis brought in about Rs. 25,700 worth of ivory and other articles. The last mentioned tribes are comparatively civilised, and our relations with them have been good.

Inquiries instituted in the case of the murder of the Naga slave above noticed show that an extensive system of slavery prevails among the hill tribes round the Assam valley. The Singphos were always in the old days notorious slave owners, and are said even now to buy from the Nagas on one side and sell to the Mishmis on the other. The Mishmis again sell to the Abors. Captives taken in the intertribal feuds and raids are the chief source of supply. The Singphos in our territory do not openly deal in slaves in their own villages. They have household serfs brought up in their houses, but for these they find wives and husbands, and generally treat them well. But in the hills the Naga tribes are for ever at feud, and only a more active political control can stop their practices of taking heads and selling captives.

The Abors are a sulky race, and have never been very cordial with us, though they have, on the whole, kept their engagements, and meet the Deputy Commissioner annually to receive the presents of cloth, tobacco, hoes, &c., which we give to them as compensation for loss of *posa*, or the right of direct collection on the plains

This year some of the clans showed themselves dissatisfied with the amount of their presents, and at first refused to take them. Eventually, however, they came down to Sudya and accepted their share. Much mischief is done among the Abors by the Miris, through whom all communications at present have to pass. The Government has, however, now sanctioned the salary of an Abor interpreter, if one can be found. The Abors themselves are dissatisfied with the Miri go-betweens, and one clan looted a Miri village lately for failing, as they thought, to carry a message correctly to the Deputy Commissioner. Another clan attacked a party of Assamese trespassers, whom they caught some days' journey within the hills taking India-rubber. The Assamese brought this upon themselves, and it can hardly form ground of complaint on our part against the Abors. It is very desirable, however, to see more of this tribe, as, if not friendly, they might be troublesome enemies.

NAGAS.

Turning to the south of the Assam valley we come to the hills inhabited by Nagas. The question of Naga policy and the best mode of managing the Naga tribes has met with much consideration during the past year. On the South Lukhimpore and Secbsaugor frontiers there has been cause to feel that matters are at present on an unsatisfactory footing. The Namsang Nagas of Lukhimpore have for instance been advancing claims to lands occupied by tea gardens, which, in the present undefined state of the boundary, are very embarrassing. Similarly the Banfora Nagas of Secbsaugor have been quarreling with their Assamese neighbours and making demands, which, though for the present amicably settled, may any time revive in a troublesome form. On another part of the Seebaugor border a serious outrage has occurred, in dealing with which the Government is again hampered by the ill-defined character of its jurisdiction and policy. This was the massacre by the Kamsingia Nagas of a party of Borlangee Nagas, who, having come down to the plains to trade, were waylaid within two miles of one of our tea-gardens and butchered at a time when they thought themselves secure from any enemies they might have in the hills. Twenty-three women and children were killed and decapitated. Although this outrage took place, as has been stated, in the plains, and close to a tea grant, it appeared that the locality was beyond that tract over which the revenue survey had passed, and that in fact the boundary of the district had never yet been authoritatively defined. The Kamsingias have of course been dealt with, for undoubtedly the hill-men look upon us as the guardians of the plains. They have given up the skulls and paid compensation on our demand to the Borlangees, both tribes promising at the same time to drop the blood feud which led to the massacre. Had the boundary been clear and known, this atrocious outrage would have merited and received far other treatment. But as it is, the Government of India did not see its way to punishing the murderers in any more stringent fashion. It has, however, on the Lieutenant-Governor's suggestion, been decided to lay down the boundary line as it has been laid down along the Kamroop and Bhutan frontier, to mark off by pillars the limits of our civil jurisdiction, and to warn the tribes that within those limits no raid will be permitted—

no interference allowed. At the same time a definite policy with respect to the Naga tribes beyond the line has been sought for, which may be expressed as 'the establishment of political control and influence without any assertion of actual government.' The system, in fact, under which the Angamis have become peaceable is to be tried on the other tribes; and the only question is whether the Eastern Nagas should be brought under a separate political agency or included under the charge of the Political Agent of the Angami Hills.

It will be convenient to notice here what has been done this season in connection with the question noticed at page 26 of last year's report regarding the boundary between Manipore and the Naga Hills. The Government of India having decided to maintain in its integrity the line of 1842, so far as it went, and to prescribe a boundary line from that point eastward to Tellizo, which should give over to Manipore the villages from which she claimed to have made actual collections of tribute, the task of demarcating this was entrusted to Captain Butler, the Political Agent, acting in conjunction with Major Godwin-Austen of the Survey, and Colonel Thompson, the Governor-General's Agent at Manipore. It was the wish of the Government of India that after carefully demarcating the line of settlement as far as Tellizo, the party should proceed to survey the watershed as far north as the Patkoi pass, a part hitherto quite unknown to us, only the general direction of the range having been guessed. It was understood that eastward of Tellizo, Manipore had not attempted to cross the watershed towards Assam, or to exercise any authority over the tribes there situated; nor does it appear from any evidence since procured that she had in fact done so. But the survey of the watershed was from the outset most distasteful to the Maharajah, fixing, as it would necessarily do, a definite limit to any future acquisition on the side of the Naga Hills. Every obstacle that was possible was thrown in the way of the survey party. A party of Manipoorie troops was sent by a circuit to cross their intended line of march some distance ahead, and there to attack the Naga villages in order to compromise our officers, who were apparently acting in conjunction with Manipore. The *ruse* succeeded, for the survey party, when it came up, was attacked, and but for the resolution and gallantry of those in command, the consequences might have been most serious. The Nagas were very soon convinced of their mistake, and our officers entered the disputed village; but it was impossible to proceed further in this direction without preparations which dependence on Manipoorie aid had made to seem unnecessary. It was deemed advisable to turn aside to visit the Maharajah and try to persuade him to obey the orders of Government, or failing this to seek instructions from the Government of India. Peremptory orders to the Maharajah were in due course issued by telegram and letter, but the season had been lost, and the survey was only able to work its way up the east face of Manipore and back to the neighbourhood of Tellizo, when it had to break off its work. This visit to Manipore, however, was the means of establishing one very important fact. The watershed, instead of running directly north-east from Tellizo, as it has hitherto been shown in the maps, was found to take a deep bend to the southward, so as to form a valley watered by a considerable

river, there called the Lanier, which (there seems every reason to believe) flows north into the Dikhoo of Assam. It is just possible that it takes an unexpected bend to the east and south, so making its way through some gorge in the Saramethi range to the Irrawaddy. Until the course of the Lanier has been explored and the country through which it flows surveyed, it will be impossible to say what is the watershed of Assam and Burmah in this quarter, and what should be the boundary of Manipore.

We have now, as the result of old explorations in the east and of modern explorations in the west, some knowledge, more or less, of a considerable portion of the Naga Hills; but there is a large tract between what is called the Kopamedza range and the Saramethi range, comprising the country where the head waters of the Lanier were seen, and thence to the Dikhoo, which is still quite unknown to us, beyond the small part seen by Captain Butler and Major Austen during their recent explorations, and the distant observations taken by the latter officer. While in these countries the ridges of the hills are inhabited up to a moderate elevation; when they pass a certain height they become race boundaries. Captain Butler believes from what he has seen that in the upper part at least the Kopamedza range is so high as to form a race boundary between different tribes of Nagas, so that possibly the trans-Kopamedza Nagas may be to some extent an isolated race. The Saramethi range is certainly very high, as much as 12,000 feet in some points, and must constitute an effectual barrier between these Nagas and the tribes of the Kyendwen country of Burmah, through no part of which is any communication known to exist. It may be said, as the result of most careful inquiries, that we can gather no trace of any communication between the tribes known to us and the Burmese country, from the latitude of Manipore to that of Sebsaugor. Along this part of the frontier between Assam and Burmah there seems to exist, as has been said, a very high and difficult mountain barrier. There is a route from Manipore to Sumjok and the Kyendwen on the south, and from Sebsaugor and Debroogurh there are routes by Longba and the Patkoi to the Hookong valley, but apparently none between these points. All the probabilities seem to point to the Lanier and country between the Kopamedza and Saramethi ranges draining into the Dikhoo and Brahmaputra; but there is just a doubt about this, and till this doubt is cleared up the whole of the great geographical and political question remains unsolved.

The Lieutenant-Governor has therefore suggested that a geographical exploration be undertaken next cold season to trace the Lanier to the Dikhoo, or to an outlet through the Saramethi range to the Irrawaddy, if that be possible. His Honor would not at present try to enter into permanent political relations with the tribes inhabiting this country, but would only trust to such officers as Captain Butler and Major Austen doing as they have already done in pushing their way through these people and solving the geographical questions now pending. The Manipore boundary he would leave to be settled after the main question on which it depends is disposed of.

Putting aside the unexplored country from the point where Captain Butler and Major Austen stopped last season to the Dikhoo, we may say that east of the Dikhoo the accounts of Brodie and others

show that the Naga country is *narrow*; that the dividing range that separates us from Burmah is not very far beyond Brodie's route, and the intermediate tribes cannot be very large. We know generally the tribes along the Sechsangor frontier, as also all the Angamees and cognate tribes, since Captain Butler has been through the whole of these latter. He has also seen from the range opposite, which he traversed in 1872, the villages of Nagas inhabiting the western spurs of the Kopamedza range, but he does not know much of them.

The operations therefore which His Honor has proposed should be undertaken are as follow:—

1st.—The geographical exploration above mentioned.

2nd.—The settlement of the Sechsangor and Lukhimpore-Naga boundary above referred to.

3rd.—The gradual carrying out, so far as may be, of the policy already enunciated, viz. "the establishment of political control and influence without any assertion of actual government."

With respect to the establishment of political control over the tribes, the Lieutenant-Governor considers that that can only be brought about gradually, and if Assam is to be made over to a separate administration, he cannot attempt to predicate exactly what must be worked out as circumstances arise. He has, however, said that our object should be to establish a kind of political police over the tribes, and thus restrain them from the shocking head-taking, which is their chief crime. We should not, His Honor thinks, absolutely refuse to interfere in the quarrels of those tribes which are brought within our political control. On the contrary we should arbitrate between them, and in the event of a clear and flagrant case of attack by one on another in defiance of our arbitration, we should endeavour to enforce an award. To begin with: Captain Butler, backed as he is by a good armed police, and having established, as he already has, much influence over the Angamee tribes, should be authorized to do what he can to keep peace among them. For this purpose, and generally for the better conduct of his duties as Political Agent, the Lieutenant-Governor thinks that he should be moved forward from his present low, unhealthy, and inconvenient head-quarters of Samoogoodting, where he and his office suffer from constant fever, and where he is away from the Angamees whom he is supposed to control, to a higher, healthier, and more convenient spot, where he might control the Angamees, the Lhotas, and any other tribes that he can bring under his influence.

All our past experience convinces the Lieutenant-Governor that the best way of dealing with these eastern tribes is to establish a political police among them and become familiar with them. We then stop raids, as we have stopped those of the Garos, the Angamees, the Khasias, and it is to be hoped the Lushais. While we leave them unknown in their obscure hills and jungles, there is no security whatever against the raids which continually occur; once we know them we find them very amenable to authority.

On the subject of the exploration of the unknown Naga country, it is of course impossible to say now that it can be done absolutely without risk. The Lieutenant-Governor can only trust to the officers on the spot, and it would be fully explained to them that they are not

asked or expected to incur an excessive risk. If when on the spot they do not see their way to following out the enterprise successfully, it will be their duty to return, and not to compromise their position. But the object is a great one. Captain Butler has a remarkable power of influencing these people; he has hitherto succeeded in going among them successfully, and the Lieutenant-Governor has begged that he may be allowed to make the attempt, in which we may rely not only on his gallantry, but also on his discretion.

The proposals of this Government have now been substantially sanctioned by the Government of India, and arrangements are in progress to make the explorations and demarcations proposed the ensuing season.

The administration of the Political Agency of the Angamee Naga Hills has continued to be as successful as in former years. The year was favorable as regards both crops and public health. Trade with Assam and Munipore seems to have taken a start; tea-seed, cloth, and ponies being exchanged in increasing quantities. The charitable dispensary is attracting great numbers of hillmen; the medical officer's skill and tact have overcome what prejudice there was against strange methods of treatment. The Lieutenant-Governor has given increased grants for roads, and has urged on Captain Butler the importance of opening out the country as much as possible.

No special notice is called for of the Rengma Nagas living in the jungly hills between the Kolliani and the Dhunsiri, or of the Mikirs inhabiting the low hills between the Kolliani and the Jumoona. These tribes are chiefly under the management of the Political Agent in the Naga Hills, and are harmless and inoffensive.

KOOKIES IN THE NAGA HILLS.

Mention has been made in former years of the colonies of Kookie immigrants from the south that had been settled along the frontier of North Cachar as a sort of protection against the Angamee Nagas. They were at one time supplied with arms by Government, and obtained grants of land on favorable terms. The quarrels between them and their Naga neighbours in the Munipore frontier recently led to great trouble, but now that the boundary has been demarcated, things seem to have quieted down.

KHASI AND JYNTEAH HILLS.

The Khasi and Jynteah Hill districts have this year been as quiet as last year's report described them. New rules, providing a simple procedure in civil and petty criminal cases, have worked well, and the chiefs and village councils have disposed satisfactorily of nearly all the work that arose. There is hardly any serious crime calling for the interference of the Deputy Commissioner.

GAROS.

Next to the Khasias, the remainder of the hills lying between Assam on one side and the Sylhet and Mymensing districts on the other, is the Garo country, most of it hitherto marked in the maps as unexplored and independent. In consequence of outrages committed

on our dependent villages by communities of independent Garos, the Lieutenant-Governor drew the attention of the Government of India to the absolute necessity which existed for thoroughly reclaiming that part of the Garo Hills which was still independent of control. It was stated that since the policy of direct management of the hill communities had been introduced in 1866, village after village had submitted to the jurisdiction of the Deputy Commissioner in charge, voluntarily enrolling themselves as British subjects, and proving the genuineness of their action by regular payment of the trifling dues imposed on them. It was shown that a considerable portion of the hills had been thus brought within the pale of regular government. It was explained that the Lieutenant-Governor would have been quite content to wait for the gradual submission of the remaining independent Garos had they on their part been content to live at peace with their neighbours now under our protection; but they had chosen to commence active hostilities by raiding on dependent villages, and frequently gave protection to criminals who had offended against our laws. Conduct like this threatened disturbance, not only to the peace of the Garo district, but danger to the plains of Gwalpara and Mymensingh, in which on more than one recent occasion the Garo raids had caused considerable panic. The Lieutenant-Governor proposed therefore to put an end to the independence of the savages inhabiting this nook in the midst of British territory, bringing them under the direct control of the Deputy Commissioner, and opening paths through the centre of the hills along which our police could patrol.

The Lieutenant-Governor's proposals met with the approval of His Excellency the Governor-General in Council, and the necessary preparations for an expedition were at once taken in hand. The Lieutenant-Governor, after consulting with Colonel Haughton, the Commissioner, considered it expedient to allow no possible chance of miscarriage in such an enterprise, and provided for the collection of at least 500 armed police, supported on the side of the Khasi Hills by three companies of regular troops. It was also decided not to commence active operations till the middle of November, by which time it was hoped the country would become tolerably healthy for men from the plains.

The expeditionary force was divided into three columns. One column, under Captain Davis, entered the hills from the Goalpara district on the north by the Nibari Dwar; a second, under Mr. Daly, entered from the Mymensingh district on the south; the third or main column, under Captain Williamson, the Deputy Commissioner, marched from Toora, the head-quarters of the Garo Hills district. It was arranged that each column should follow a prescribed route through the independent tract, visiting and enforcing the submission of all villages on its way; and it was hoped that all would meet at a central rendezvous at about the same time. Lieutenant R. G. Woodthorpe, R.E., Assistant Superintendent of Survey, was deputed to conduct survey operations in communication with Captain Williamson.

The expedition was singularly successful. Captain Williamson occupied without opposition Dilmagiri, the leading independent village, which had been concerned in the recent raids, and received the

submission of all the hamlets in the neighbourhood. Mr. Daly joined him on the 14th December, after repulsing, without loss of men on his side, an attack which the Garos made on his camp. He, too, had received tenders of submission from most of the villages on his route. Establishing themselves at Rongrengiri, Captain Williamson and Mr. Daly, while waiting for the arrival of the northern column under Captain Davis, visited all the Garo villages within reach, and after receiving their offers of submission, arranged for the payment of the usual small house-tax, occasionally inflicting and realizing fines where opposition had been offered or orders disobeyed, and insisting on the surrender of all skulls kept as trophies of raids.

Captain Davis's column was longer on the road, and did not join the others till the 2nd January. He had, however, visited all the independent villages on both sides of his line of march, and though he had been twice attacked, he had been able to repulse the Garos and punish the offending communities without much difficulty.

During January the remaining independent villages were visited, and submitted. The Garos, convinced apparently that resistance was hopeless, accepted the terms offered them by Captain Williamson, and have, under his directions, been engaged in opening out paths across the hills in several directions, which they will be required hereafter to maintain. The survey had also completed its duty and filled up the blank which has hitherto disfigured the maps.

Captain Williamson has appointed *luskurs*, or village representatives in the newly-acquired tracts, who will be responsible for management on the system already in force in the dependent villages. The hills have been again traversed by him from end to end with a small guard, and found to be perfectly quiet. A strong police post has been established in the heart of the country hitherto independent; the new state of things has been accepted with a considerable amount of cheerfulness, and great eagerness for trade is manifested on all hands. The expeditionary force has been broken up, and men and officers have returned to their own districts.

Although the success which has been achieved has been rapid and is likely, as the local officers believe, to prove lasting, the Lieutenant-Governor was desirous to leave nothing to chance. The ordinary police force of the Garo Hills number 150 men. These are used solely as military guards, the administration being based on the village system of *luskurs* already alluded to. The armed police has now been raised to 300 men, and posts have been so arranged that the authority of Government may be visible and beyond doubt.

Money has been granted to complete the system of roads across the hills, towards the opening of which much has been already done, and no effort is being spared to establish markets and develop trade. Roads and markets ought very speedily to create a social revolution in the hills. Liberal assistance has been promised for educational purposes.

There is much reason to believe that the country is rich in many natural products. Its cotton trade has always been considerable, and was known even in the days of the Moguls; and the Lieutenant-Governor hopes that instead of our having to burn large quantities

of cotton in punishment of outrage, as was unhappily necessary in a few instances, we may find here a new source of supply to Manchester. The Deputy Commissioner is now doing what he can, by the introduction of improved seed and by encouraging trade, to develop this cultivation. The timber of the hills is also expected to prove valuable, and, while preserving all reasonable jungle rights of the Garos, Government may expect a fair return from judicious forest operations. Wild elephants are said to be very numerous, and probably khedda operations would prove profitable at an early date.

Since the close of the expedition the Deputy Commissioners of the Garo and Khasi Hills have succeeded in laying down a boundary between their districts, which will moreover soon be connected by a good hill road. The boundary between the Garo Hills and Goalpara is also in need of adjustment, and will in all probability be resurveyed and settled during the ensuing cold season.

LUSHAI AND CHITTAGONG HILL TRACTS.

With the close of the Lushai expedition it became necessary to consider the future policy of Government towards those tribes, and the measures necessary for the permanent defence of Cachar and Chittagong. As regards policy, the Government of India adhered to the system of exercising political influence only without direct interference or control, coupled with the definition of a precise boundary line beyond which ordinary jurisdiction should on no account extend. This line was to be guarded by a chain of posts, and beyond it only political relations with the tribes were to be cultivated. In order to the ascertainment of the best line to adopt, it was decided to have a careful survey made of the country between Cachar and Chittagong along the eastern frontier of Hill Tipperah; the idea being that the chain of posts, after being carried from east to west along the southern frontier of Cachar, should turn south along the eastern border of Hill Tipperah, and thence be carried along some one of the hill ranges till it met the advanced posts of the Chittagong hills, and so down the eastern face of the Hill Tracts district till it reached Arracan. It was held to be very important to define this eastern boundary of Tipperah, and it was proposed to entrust its defence to the Rajah of that state. The eastern face of the Chittagong Hill Tracts was also to be carefully surveyed in order to the selection of a range suitable for the establishment of posts and opening of patrol paths.

For the survey of the Tipperah frontier and the country between Cachar and Chittagong, Captain Badgley and Mr. Chennell of the Topographical Survey were deputed. They were assisted by Mr. Power, the Political Agent of Hill Tipperah, who accompanied them throughout, and but for whose indefatigable exertions and tact the undertaking would probably have been a failure. The party entered the hills from Sylhet, and after an exploration of the Jampai and Hachik ranges, Mr. Chennell was left to survey the interior of Hill Tipperah, while Captain Badgley and Mr. Power pushed across the hills to Sirthay, where the Deputy Commissioner of the Chittagong Hill Tracts had established a dépôt of provisions in anticipation of their arrival. After a few days' rest they again started north, and made their

way across the ranges to the point marked as Peak Z and Bepari Bazar on the Cachar side of the watershed, and thence to the Cachar district, passing by the villages of the Lushai Chief Sukpial, and being the first party that had crossed between Cachar and Chittagong. The Lushais offered no opposition to their progress, though they were not by any means cordial.

The survey on the Chittagong side was conducted by Mr. Cooke, in company with Captain Lewin, the Deputy Commissioner. They explored thoroughly the Oheepoom and Saichul ranges, the two most promising lines of possible defence, and Captain Lewin was also met by the Deputy Commissioner of the Arracan Hill Tracts, who worked his way across from Talukmai to discuss the question of how best to link on our line of defence with that of British Burmah.

The results of these surveys, and the proposals based upon them by the Lieutenant-Governor, may be briefly stated as follows. It has been ascertained that the eastern part of Hill Tipperah is quite uninhabited, and that a chain of posts along either the Hachik or Jampai would be enormously expensive, and in such a country quite ineffective. The Lieutenant-Governor has therefore abandoned the idea of carrying a chain of posts down those ranges. He would maintain the present posts on the frontier of Cachar and Sylhet, and encourage as much as possible the development of trade with Bepari Bazar and other Lushai marts. The reports show that Sukpial, the leading Chief of the Western Lushais, has been moving his villages southward and nearer to our Chittagong Hill Tracts, from whence the Lushai country is much more accessible than on the Cachar side. It seems therefore advisable to attempt to reach and influence him and the neighbouring tribes from the south rather than from the north. During the past cold season, while the surveys were going on north and south, the police of the Chittagong Hills were establishing themselves at Sirthay in the immediate vicinity of Ruttonpooa and the Syloo tribes of Lushais. The effect of this measure has been most marked and gratifying. Notwithstanding the interruptions of his southern journey, Captain Lewin has been able to establish the most friendly relations with the Syloos, who were utterly cowed and broken by the expedition. They have become a perfectly friendly and subservient clan, grateful to us for our aid when they were starving from loss of crops, and anxious to settle under our protection. At the request of one branch of the clan a guard of 50 police was stationed in their midst during all last season to protect them from the Howlongs, the whole cost of feeding this guard being voluntarily borne by the tribe. There has also been a good deal of friendly intercourse with the Howlong clans, and they have referred some of their quarrels to the arbitration of our officers. The Lieutenant-Governor, in concurrence with the local officers, believes that it is only by maintaining an advanced post that we can hope to bring political influence to bear upon the Syloos, Howlongs, and other Lushais. He would work upon Sukpial and the Western Lushais by throwing out an advanced post from the Chittagong side somewhere among the Syloos, as was done last season. This post would dominate Sukpial, protect any trade route opened between Bepari Bazar and the Hill Tracts, and form a centre of political influence in the manner

desired by the Supreme Government. To protect our own Hill Tracts from raids by Southern Howlongs and Shindoos, it is proposed to establish a system of posts and patrols along the northern part of the Oheepoom and southern part of the Saichul ranges. The local officers desire that British Burmah should advance the Arracan Hill Tract posts and patrols to meet ours. It is understood, however, that the Chief Commissioner thinks the Chittagong Hills should depend entirely on its own arrangements for defence. The fact, however, is that the southern portion of the Hill Tracts is chiefly exposed to raids from Shindoos, a tribe only approachable from the side of Arracan, and of whom we know nothing. Looking to this and to the fact that the Sungoo valley is inhabited almost exclusively by tribes of Arracan origin and connections, the Lieutenant-Governor is disposed to think that this portion of the Hills, and also the Cox's Bazar sub-division of Chittagong, mainly inhabited by Mughls, should be made over entirely to Arracan, which could then make its own arrangements for defence and patrol. The whole subject is before the Government of India.

As regards the eastern boundary of Hill Tipperah, the Lieutenant-Governor has proposed to prescribe a river rather than a mountain boundary. In these countries the tops of ranges are generally occupied and cultivated, and unsuited for that reason to serve as boundaries. It has been suggested that the Lungai river, running between the Jampai and Hachick ranges, should be taken as the boundary line up to its source at Betlingsib. The line would then run across the watershed to Dolujuri, and thence along the recognised Hill Tipperah border by Surduing to the Fenny.

The administration of the Hill Tracts of Chittagong is yearly growing in importance. Large settlements of immigrants from Hill Tipperah have taken place in the Myonce valley. Plough cultivation is being extended in all directions under a system of Government advances. This has inevitably led to a localisation of the authority of the Joomea Chiefs, who had hitherto followed the cultivators of their clan for poll-tax into whatever part they wandered. A registry of the cultivators themselves has now been undertaken. The timber trade of the hills has largely expanded, and the revenue derived from river-tolls has become considerable, the demand for 1872-73 being Rs. 45,129; the demand for ordinary revenue being Rs. 52,684. The expenditure, Rs. 1,71,000, is at present heavy compared with the revenue realized. This is unavoidable in a frontier district which pays for the protection of those behind it, but the local authorities are sanguine that the resources of these hills are only begun to be developed.

Much has been done during the year to improve the frontier police, and they are now a well-armed and efficient body of men. They are expensive, as the cost of supplying provisions and of clothing in these hills is necessarily very great; but it is important to have a good class of fighting men, and to retain them as long as possible in the force. A European medical officer has been sanctioned for the district, as the unhealthiness of the ordinary posts is notorious. It is hoped that if it is permanently stationed on the higher ranges the health of the force may improve. The main difficulty in the way of this is that the Deputy Commissioner, while on political duty at Sirthay, is too far removed

from the supervision of the civil administration of the Hill Tracts district. A plan for remedying this by readjustment of jurisdictions has been suggested to the Government of India.

REGULATIONS FOR THE EASTERN FRONTIER.

Reference was made at page 18 of the appendix to last year's report to the proposal to extend the Statute 33 and 34 Victoria, Chapter 3, to Assam, Cachar, and the Chittagong Hills, and in the present year the proposal was sanctioned and carried out.

The first use of the power of summary legislation given by that Act was to pass a regulation for the frontier of these districts.

It had been found that there was pressing necessity of bringing under more stringent control the commercial relations of our own subjects with the frontier tribes living on the borders of our jurisdiction. In Lukhimpore especially the operations of speculators in caoutchouc had led to serious complications, not only interfering with the revenue derived by Government from the India-rubber forests in the plains beyond the line of our settled mehals, but threatening disturbances with the hill tribes beyond. The spread of tea-gardens outside our fiscal limits had already, as was shown in last year's account of the Seehsaugor Nagas, involved the Government in many difficult questions with the hillmen, and on the whole the Government came to the conclusion that it was necessary to take special powers and lay down special rules.

Accordingly a regulation was drawn up by the Lieutenant-Governor and approved by the Governor-General in Council to give effect to this policy. This regulation gives power to the Lieutenant-Governor to prescribe a line, to be called "the inner line," in each or any of the districts affected, beyond which no British subject of certain classes or foreign residents can pass without a license. The pass or license, when given, may be subject to such conditions as may appear necessary. And rules are laid down regarding trade, the possession of land beyond the line, and other matters, which give the executive Government an effective control. The regulation also provides for the preservation of elephants, and authorizes Government to lay down rules for their capture.

Surveys and inquiries to assist the local officers in defining the inner line in Lukhimpore and elsewhere are now in progress.

The question of extending 33 Victoria, Chapter 3, to Sylhet and to the districts of the Cooch Behar division, is under the consideration of the Supreme Government.

COOCH BEHAR.

Of the Tributary Mehals, Cooch Behar is now under the direct management of British officers, the Rajah being a minor. The administration of Cooch Behar has received much attention during the year. A resettlement of the land has been going on in which the rights of the jotedars have been ascertained and defined, farms have been done away with, and a system of direct collection introduced. The local authorities speak in strong terms of the improvements visible on every side, material and other; and the Lieutenant-Governor has no doubt that our management is a great improvement on the misrule which seems to

have prevailed in Cooch Behar to an unusual extent. The main doubt which His Honor feels with regard to the arrangements in force is whether, looking forward to the time when the Rajah may come to administer the territory, it is good to have introduced so much of the technicalities of our system and given pabulum to so many lawyers. It is also open to remark that the administration is largely in the hands of foreigners, in numbers equal to the establishment of a native state, but paid at rates higher than those of regulation districts.

The Lieutenant-Governor has impressed on the Commissioner the propriety of revising the expenditure under several heads where it has recently unnecessarily increased. His Honor's view is that there is, however, one thing upon which expenditure is legitimate, and on which hardly any information is given in the Commissioner's report, though it is one of the most important subjects for notice, viz. public works. The Government does not desire to accumulate large sums of money for the young Rajah, as this may in the end only demoralise him. But while the present very costly establishment will leave no margin for the expenses which a Rajah is sure to incur, and thus this mode of spending his money will only tend to embarrass him, on the other hand, by spending any surplus funds on permanent material improvements, we develop the country and leave the increasing income available to him when he comes to want it. In this view the two roads passing through Cooch Behar are to be fully completed so as to have no breaks whatever, except ferries over large rivers where a ferry boat can always ply. The two roads are—(1) that connecting with Julpigoree on the one side and the Brahmaputra on the other; and (2) that running to Rungpore on the one side and Buxar and the hills on the other. Other works of importance will also be undertaken as funds permit.

THE TRIBUTARY MEHALS OF CUTTACK.

At pages 39-40 of the appendix to last year's report an account was given of the constitution of these mehals, and it was noticed that their population had been ascertained by the census to amount to not less than 1,289,309 souls.

The largest estate is Mohurbhunj, which comprises 4,243 square miles, with a population of a quarter of a million. A large portion of this estate, called Bamunghatty, is now managed under the supervision of the Deputy Commissioner of Singbhoom, in consequence of disturbances arising out of the oppression of the aboriginal inhabitants by the Rajah's officials. Next in importance comes Keonjhur, with an area of 3,096 square miles and a population of 181,871 souls. This estate, which has been, as noticed in former reports, for some years under Government management, has now been made over to the direct control of its Rajah, on his undertaking to maintain the settlements approved by Government, and to make no change without previous sanction. Dhenkanal has an area of 1,463 square miles and a population of 178,072. Ungool was confiscated in 1847, and is now managed by a tehsildar under the orders of the Superintendent. Tigariah is the smallest estate of all, comprising no more than 46 square miles, but it is one of the most populous for its size, having an

average of 357 souls to the square mile. Bankee was confiscated in 1840, and is under the direct management of Government. Its area is 116 square miles, with a population of 49,426 souls, making it the most densely populated of all the estates. Khundpara, another small estate of 244 square miles in extent, has an average of 249 persons to the square mile. Boad, including the Khondmals, measures 2,064 square miles, with a population of 108,868 souls. The Khondmals comprise the hilly country to the south of the estate, which was ceded to us in 1840 on account of the Rajah's inability to put down the practice of human sacrifice among the aboriginal inhabitants. The population of this tract numbers 51,810 souls. Last year, at the earnest request of the sirdars or village heads, a tax was imposed on the grog-shops of the Khondmals, the proceeds of which are devoted to schools. This year again they have petitioned, volunteering to raise a tax of four annas per house for the purpose of opening up roads. They stipulated that a punchayet or committee of headmen should advise in the expenditure of the money, and Government has accepted the offer, contributing an equal sum to that locally raised, viz. about Rs. 2,000.

The character of the administration of the Tributary Mehals of Orissa was explained in last year's report. The Chiefs of these mehals seem on the whole to manage their estates with success, and pay their tribute regularly and without difficulty. The boundary disputes, which had been pending here and there for some years past, have now been nearly all disposed of. Crime is promptly dealt with, and the civil and criminal procedure has been made suitable and effective without any leaning to technicalities. Sixty-eight schools, with nearly 2,000 children, exclusive of village pathshalas, have been opened out in the country. Those established in Keonjhar while the State was under Government supervision, were kept on by the Rajah last year at a cost to the state of Rs. 1,923. He has not, however, shown any desire to increase their number, which was 17. They were attended by between 600 and 700 children, who generally show an intelligent interest in their studies. Their parents, except among the forest tribe of Towangs, evince an increasing appreciation of the advantages they thus enjoy. In the other tributary mehals increasing encouragement has been afforded to education by the Rajahs, especially by the Maharajah of Dhenkanal, who supports a free English school and 9 vernacular schools attended by 325 boys. In the lapsed mehals of Ungool and Banka there are 9 schools supported by Government and attended by 267 pupils. In the rest of the mehals there are 32 schools with nearly 600 pupils. Coal-beds have been discovered in the Talchere estate, and measures were being taken by the Superintendent during the year to give this coal a fair trial in Cuttack.

An account of a tribe called the Pans, notorious as thieves and cattle-poisoners, has been given by the Superintendent. The clan numbers 111,902 souls according to the census. Their chief occupation is weaving. Through the exertions of Mr. Ravenshaw this tribe has consented to put itself under some sort of organization to prevent thefts, and efforts are being made to settle them on waste lands and bring them into regular habits of living.

SONTHALIA.

An account was given last year of the special measures adopted to meet the grievances of the indigenous population of the Sonthal Pergunnahs. The district was removed under the Act 33 Vic., Chapter 3, from the operation of the laws applicable generally to Bengal, and a regulation passed providing for the settlement of the pergunnahs, specifying the laws to be in force, and arranging other matters, as noticed at page 70 of the appendix to the report of 1871-72. The effect of these measures has been all that could be desired. Perfect tranquillity has prevailed throughout the tract. The people know that their rights are being ascertained and will be duly protected, and the local officers have been placed in a position to administer substantial justice in a simple way, without being hampered by the technicalities of Regulation law.

THE TRIBUTARY MEHALS OF THE SOUTH-WESTERN FRONTIER.

There is little calling for special notice in the events of the year in these estates—the best proof of their successful management. There was in places a deficient rainfall, but no distress was caused to the people, and the revenue and tribute collections were unaffected.

The financial affairs of the estates of Sirgooja and Korea are superintended by the Commissioner, who has again secured a surplus for investment. He does not interfere with the finances of the other estates. The heir apparent of Sirgooja and the minor proprietor of Korea attend school regularly at Ranchi, and the former is reported to be making good progress.

Most of the petty crime in these estates is disposed of by village heads or by punchayets; more serious crime is dealt with by the Chiefs, who commit the most heinous cases to the Commissioner. This year only 457 cases of all kinds were reported, and 403 persons only were convicted criminally.

The people in Chang Bhukar have been spared from the depredations of wild elephants in consequence of Rajah Bindesuri's kheddah operations, and it is said that in various parts of the estates there is a sensible diminution in the number of tigers owing to the operations of tiger-hunters who have been induced to come forward by the high rate of rewards now granted. The Government has called for full particulars on this subject.

A considerable extent of boundary between Gangpur and Sambhalpur, which had been left undetermined by the survey, was definitely laid down in the cold weather by the Commissioner and Captain Bowie, and a fruitful source of quarrel was thus removed.

There were complaints against the manager of Korea in his capacity of Magistrate, which are under investigation; but apart from this all the tributary chiefs discharged their duties loyally and well. Since the year closed the Government of India has decided that the present settlements of the tribute paid by them shall be renewed for a period of twenty years, but at the same time it has been distinctly noted that the amount will be in fact liable to revision at the close of that period.

NAWAB NAZIM.

Mention was made in last report of the pecuniary embarrassments of the Nawab Nazim, and of the attachment by creditors of nizamat buildings. Things have gone since then from bad to worse. The Court of the Subordinate Judge having decided in the first instance that the properties were liable to sale, it became necessary for Government to file regular suits to have them declared State property and not liable for the personal debts of the Nawab Nazim for the time being. The suits are still pending. The Government of India has, however, determined to take matters into its own hands and stop by legislation the present scandal, administering the Nawab's stipend for his own benefit and the payment of his just debts.

One consequence of the Nawab's difficulties was that he could not afford dowries for his large accumulation of unmarried daughters. Marriage portions of Rs. 20,000 each have now been sanctioned, and the ladies will, it is hoped, soon find suitable husbands.

On the other hand it has been sought to economise, with reference to the large and indefinite sums hitherto spent annually on nizamat buildings, by introducing a strictly regulated budget system and bringing the expenditure under more rigorous control.

CHAPTER III.

ADMINISTRATION OF THE LAND.

THE heads of this subject prescribed by the Government of India being limited in their scope, some of the most important matters connected in great degree with the land have been dealt with in the chapter upon Changes in the Administration. The figures of the year's land revenue collections are given later, in the chapter on Revenue and Finance. This chapter is therefore mainly confined to the specified heads.

It may be mentioned here that the Board of Revenue submitted, with their report for the year 1872-73, an interesting Memorandum of the history of, and pending questions concerning, the land revenue administration of Bengal. This memorandum, prepared with much care and research by Mr. D. J. McNeile, Officiating Secretary to the Board of Revenue, will for many years to come be a useful hand-book of reference on all land revenue subjects, although it gives expression on some subjects to views and conclusions in which the Government of Bengal does not concur; and it must therefore be taken with this reservation. The Lieutenant-Governor's review of the Board's report touches on some of these points.

One of the subjects in which the Lieutenant-Governor does not agree in the views set forth in this Memorandum is the following. Under the present law the Government revenue is realized in cases of default by sale of the estate, and in no other way. If the full revenue of an estate is not paid by sunset on the last day it is due, that estate at once becomes liable to sale for the arrear; and practically, when an estate has defaulted, either by accident, or by misfortune, or for any other cause, it very frequently is sold up, however small the arrear may be. The Memorandum expresses an unqualified opinion of the success of the system. In other parts of India sale of a defaulting estate is allowed only in the last resort, after all other methods of realizing the revenue have failed. The Bengal Council in 1871, after much discussion, decided not to make the road cess realizable by means of the land sale law; and on that occasion the Lieutenant-Governor had occasion, from his place in Council, to express an opinion that the land sale law was a hard law, and was often unjust in its operation as regards third parties whose inferior rights and liens on an

Land Revenue Memorandum published by the Board of Revenue.

Law of land sale.

estate were usually obliterated when the estate, through no fault or action of theirs, came to the hammer under the land sale law.

When reviewing the Board's land revenue administration report for the year 1872-73, together with Mr. McNeile's Memorandum, the Lieutenant-Governor recorded his views on this important point in the following words:—

“ Paragraph 53 of the present report shows that no less than 762

The Lieutenant-Governor's views on the sale law.

estates were sold for arrears of revenue during the year under review. The Lieutenant-Governor would here take

the opportunity to express his dissent from the Board's statement (paragraph 116 of the Memorandum,) that ‘there can be no manner of doubt that on the whole the working of the sale law has been most beneficial and satisfactory.’ Paragraph 115 of the Memorandum seems to show that estates often go to sale for what the Lieutenant-Governor must think illegitimate reasons; and he wholly doubts the advantage set forth in paragraph 118 of the Memorandum, of giving proprietors, who take advantage of the sale law, the means of realising the very highest value for a property which would not fairly sell for so much. The enhanced price in fact is gained because the sale of an estate for arrears of revenue obliterates and defeats many private rights and liens on the land sold. It amounts to creating an encumbered estates' court at the option of the present possessors, and for their benefit only. The Lieutenant-Governor doubts if such stringent sale laws are now required. At any rate, he records these remarks as a caution against the Board's statement that ‘there can be no manner of doubt’ regarding the conclusions summed up at paragraph 123 of the Memorandum.

“ The frequency of sales for arrears of revenue in Sylhet would seem to show the inappropriateness of the sale law to the peculiar tenures

Especially in Sylhet.

of that district, and the Lieutenant-Governor greatly doubts the expediency of the change (described in paragraph 38 of the Memorandum) whereby the sale law was introduced into Sylhet in the year 1867.” As regards the management of the Sylhet district, the Lieutenant-Governor further expressed himself as follows:—

“ Sir George Campbell much inclines to think that the Sylhet putwarees should be revived in a shape similar to the mouzahdars of Assam, whom in fact they much resembled. The Assam mouzahdars are small indigenous tehsildars (rent collectors) of moderate areas. The Lieutenant-Governor must also differ from the suggestion (paragraph 40 of the Memorandum) that the proposal to make a farming settlement of Jyntea should have a renewed claim on the attention of Government; he does not think that any farming settlement should be made there at all. He sees no reason why we should not deal with the present proprietors themselves.”

SURVEYS.

‘ The statement in the appendix, Fiscal E1, exhibits the estimated quantity of work completed by the professional parties within the survey

Professional.

year ending 30th September 1873. The figures given are approximate

only. The aggregate area completed is there given at 2,783 square miles. The total expenditure is estimated at Rs. 1,90,280-6-11, which gives an average cost of Rs. 68-5-10 per square mile. The Superintendent of Revenue Surveys has brought to notice the failure in the outturn of the second division, which is engaged on the topographical survey of the Lukhimpore district.

Statement Fiscal E2 shows the work performed by the non-professional parties during the official year from 1st April 1872 to the 31st March 1873.

The estimated area demarcated in the Midnapore division is considerably less than that of the previous year for reasons which have been fully explained and which were inevitable.

The cost per square mile has accordingly increased. The Lieutenant-Governor has acknowledged the work done by the establishment on settlement and on irrigation survey to have been well done.

The compilation of survey record during the year in Hooghly is found to be very much in arrears. The work appears to have been carried on without sufficient superintendence, owing to the illness and subsequent death of the Deputy Collector in charge, and to the fact that the appointment was then left for some time vacant. A Deputy Collector, who has had much experience in survey work, and a good reputation for efficiency, has, however, recently been appointed.

It had previously been observed that earthen mounds were in Assam the only boundary marks erected by the survey parties, even at

Boundary marks. main circuit stations and on district boundaries. The Lieutenant-Governor has now directed that for the future masonry platforms are always to be erected in place of earthen mounds at points such as are mentioned above. In a country covered with forest and liable to inundation, earthen mounds will in a year or two become quite undiscoverable, and it will be impossible to identify any survey lines upon the ground. Captain Osborne's demarcation work in Durrung during 1871-72 formed an exception to the general rule. He erected a number of masonry marks on the district boundary and demarcated tea grants. The Lieutenant-Governor has desired it to be made a rule for the future that every tea grant, and every rent-free holding (except the very small ones of under two acres each), shall have *at least* one stone or masonry boundary mark. If there be one or two such permanent marks to each grant of rent-free holding, it will always be possible to identify the whole boundary and re-erect the earthen mounds.

The question of boundary marks to villages in the regulation provinces has been determined. Hitherto the revenue survey has passed over Bengal and Behar without leaving any permanent landmarks on the ground. In other parts of India the boundaries of villages are demarcated *before* survey by masonry platforms, and by large stones standing two feet out of the ground, or by other very permanent marks, and the cost of

these marks has been defrayed by the landholders. In Bengal during the last two years a very few permanent boundary marks, about one to every ten or twenty villages, have been set up at Government expense. The Lieutenant-Governor represented that it was a very great waste of money and power for the Survey Department to map a district and survey all village boundaries without leaving any boundary marks behind them, and in this view the heads of the Survey Department have for some years back agreed. The Government of India have now directed that a bill be laid before the Local Legislature for compelling landholders to erect a sufficient number of boundary marks round their villages at points to be indicated by the demarcation officer. Meanwhile an advance of money has been allowed to set up boundary marks during the current season (1873-74) round the villages now under demarcation and survey in Midnapore. It is to be feared, however, that since almost all Bengal has been surveyed without leaving boundary marks, it will be long before we can set them up, except in the small portions remaining to be surveyed.

It may be well to state two notable instances in which the extreme inconvenience and loss, from the absence of permanent boundary marks in Bengal, have come home to the Government during the year under report. The first case was the rectification of the Nepal boundary, whereon, from the action of rivers or other causes, the boundary of British and Nepal territory had become confused and doubtful. The boundary lay for a great distance in the midst of a sea of grass jungle, and when the Survey and Civil Officers

Nepal boundary difficulties.

went to lay down the boundary afresh, they found no starting point for their operations on the British side. In the archives of the Survey Office in Calcutta were the old field-books and observations; but there was not a single mark on any village boundary to show whence these observations were taken, nor were there any other permanent landmarks which the Survey Department could take as their base for the identification of the old boundary line. The other case was on the banks of the united stream of the Ganges and the Brahmaputra, where the great river cuts away and re-forms year by year scores upon scores of square miles of land. In former years, as land went into the river, the State lost its revenue, but it could claim as public property islands and new lands formed in the river bed. Constant difficulty and litigation used to arise about these islands, and accordingly there was

Identification of lands on the Ganges bank.

passed in 1847 an Act directing that the banks of these great rivers should be surveyed once in every ten years, so that the public revenue and rights might be secured. The banks of the River Ganges in the Furreedpore and Backergunge districts were surveyed in 1856-57; and reports were made by the Collector and Commissioner during the year 1873 that a fresh survey of the river bank was due, and that unless such a survey were made the Government rights could not be properly secured. On a reference to the Survey Department it was ascertained that in the absence of any permanent boundary marks to villages, it would be necessary for a Civil Officer first to demarcate the boundaries of all the villages within some miles of the river before the professional survey

could lay down the present actual river bank on those maps. If boundary marks had been erected at the last revenue survey at all the tri-junction points, the Survey Department could have taken the field at once, and could have laid down the present river bank, and the new island formations with reference to the permanent boundary marks on the old village boundaries.

The Lieutenant-Governor fears that practical experience shows that the system of revenue survey hitherto prevailing is not efficient for permanent purposes.

There has been during the year some discussion regarding the kind of survey really required for Bengal. The Lieutenant-Governor represented that the costly village survey, with its dual system of a separate demarcation party and a separate professional party, was not required. He pointed out that the revenue survey system gave maps of village (mouzah) boundaries, whereas the land revenue of Bengal was realized according to estates (meahals), and not according to villages; and he urged that what was required in Bengal was, for geographical purposes, a topographical survey, such as Captain Sconce's survey party has just finished in excellent style, and at a cheap rate, for the district of Hazareebaugh; while for agricultural purposes, for the convenience and use of landlords, tenants, and all classes of occupiers, is required a cadastral survey, showing the area and holders of every field or parcel of land. A cadastral survey is now being made by professional survey parties for some of the districts of the North-Western Provinces; such a survey will certainly be required for canal revenue purposes, for the tracts to be irrigated from the Soane, Cossaye, and Orissa Canals. The Surveyor-General was consulted by the Government of India on these representations; he maintained that a village survey had been carried over nearly the whole of Bengal, and strongly recommended that the Government should adhere to that system. The Government of India accepted the Surveyor-General's view, and decided that the Midnapore district should for a second time be surveyed on the old revenue survey. In respect to the Gowalpara district, however, the Government of India overruled the Surveyor-General and upheld the Lieutenant-Governor's view, that a topographical survey only, and not a village (mouzahwar) survey, was required.

SETTLEMENTS.

The principles upon which the settlement of the scattered estates situated in Bengal and Behar, not already permanently settled, is now carried out, are explained in the chapter on the character of land tenures and the system of survey and settlements.

In Midnapore a considerable field was opened for the application of these principles during the past year, as the current arrangements for the collection of the revenue of no fewer than 214 estates, including

Midnapore.

some of the very largest temporarily-settled estates in the Lower Provinces, expired before April 1873. Of such estates the most noteworthy were those of Majnamoota and Jallamoota, with an area, the former of nearly 150,000, the latter of a little more than 100,000, acres. For the conduct of these operations a separate Settlement Officer was appointed. It became necessary, however, to detach this officer to the urgent work of a cadastral survey of the area in Midnapore irrigable from the new canal works, and he was therefore unable to carry out a regular settlement by the time the existing agreement expired. He was therefore directed to make a summary settlement of the estates falling in on the best data he could obtain. He was to examine the estates, inquire into the increase of cultivation, and rise of rates which had taken place since the last settlement, and to fix by rough estimate such an enhanced amount of revenue as might seem fair for each estate to pay according to its existing circumstances. And it was laid down (1) that no settlement was to be renewed without getting any increase of revenue which might reasonably be obtained; and (2) that no estate on which there were proprietors or resident occupiers was to be let to outsiders by auction, but was to be settled with the proprietors or resident occupiers on a summary estimate of assets, if they were willing to accept a reasonable settlement. The settlement officer concluded summary settlements of 41 estates, with a total area of nearly 300,000 acres, including the two great estates already mentioned. In some cases, however, it was found impossible to realize under summary settlement any increase of revenue without prejudging a question of the right of the landholders to enhance the rents of a certain class of ryots, the old proprietors refusing to accept the settlement offered unless Government recognized such right.

In the other regulation districts the field for the application of the settlement rules was narrower, but in the Patna and Bhaugulpore divisions some estates of considerable size came under these operations. In the Patna division many resettlements of small estates have been made with resident ryots, and the Commissioner reports that these settlements will answer well, and are very acceptable to the ryots. The settlement, however, of the three most important of these estates, of which two belong to the district of Monghyr, and one to that of Bhaugulpore, had not been completed at the close of the year. In the Presidency division it was not found possible to complete the work of the settlement of the suburban estate of Punehannogram, where the holdings are small and consequently numerous. In the Rajshahye, Dacca, and Chittagong divisions, if we set aside the exceptional districts of Sylhet and Chittagong, the estates coming under settlement are mostly new lands thrown up by rivers; some of the new alluvial lands thrown up by the river are very fertile, and where the deposit has remained and been cultivated since the last temporary settlement twenty years ago, the land is highly cultivated. In Eastern Bengal the settlers on these lands are chiefly Mahomedan ryots, who form the bulk of the population in the littoral districts. Hitherto such ryots had been subject to a farmer or rent-receiver, who could raise their

rents and oust them. In their case, therefore, the new arrangements, under which either settlement is made with the resident ryots, or else the rights and holdings of the ryots are fully recorded, have been a great boon to a class of men who, as pioneers of cultivation on new lands, deserve the fullest consideration.

Under the Sonthal Pergunnahs Regulation the Lieutenant-Governor was authorized to provide for a settlement of the pergunnahs, and an inquiry into and record of all landed rights. An experimental settlement of Pergunnah Hurdwah was commenced early in the year under report, and that having progressed satisfactorily, it was determined to go on as quickly as possible with the settlement of the whole. The ryots in the portions not undertaken in the first instance were not unnaturally anxious that their turn should come soon. A special establishment for this work, which is calculated to last two years, was sanctioned in September 1873, and the work is now being actively carried on under Mr. Browne Wood, the Deputy Commissioner, who has been appointed to the special duty, his place as district officer being supplied temporarily by an acting officer. The Sonthal Pergunnahs are for the most part permanently settled. And the present settlement arrangements do not touch the permanent settlement of the Government revenue, but are designed to protect the aboriginal races who occupy the land from the rack-renting of alien zemindars. Under the settlement villages are being demarcated, and the rents of all occupiers are being recorded; in some cases excessive enhancement of rent recently made will be disallowed; in all cases provision will be made against further enhancement within a reasonable term of years. As far as possible the settlement officers will abstain from measuring and mapping holdings, though in some villages, where any other adjustment of differences is impossible, a field survey will have to be made as the last resort.

It remains to add a few words on the settlements of the Cooch Behar division. The settlement of the Eastern Dooars does not require special notice further than to say that orders have been given to demarcate the boundaries of the estates. But the arrangements proposed in the Western Dooars are under revision, in so far that the Lieutenant-Governor has directed a thorough inquiry into the holdings and boundaries of the jotedars. The present Commissioner states the Government lease to be their sole title. It is manifest that in a region possessing such extensive uncultivated tracts likely at no distant term to be opened up by the extension of the railway system, and possibly the spread of the area under tea cultivation, it is very desirable that before a settlement is granted the actual rights of the occupiers should be clearly defined and boundaries sufficiently marked. This is more especially needful as it was proposed to recognize the jotedar's tenure as transferable, and consequently capable of passing into the hands of persons from whose encroachments the State might have more to fear than from those of the original tenure-holder. The necessity of fully protecting the rights of *under-tenants* has also been further

recognised, and tehsildars maintained on the regular establishment and paid by salary are to be substituted for the present tehsildars paid by commission.

WASTE LANDS.

In last year's report (page 141) it was stated that while the waste land rules were being dealt with, and while special rules enjoining careful inquiry into existing rights of land claimed to be sold as waste were in operation, the Government of India had prohibited further sales of waste lands with a view to consideration of the whole subject. That prohibition (issued in August 1872) is still in force. The Government of India, however, permitted the Lieutenant-Governor to allow the sales of waste lands applied for before August 1872 to proceed in cases where the applicants really wanted the land for *bond fide* tea cultivation, where there were no pre-existing rights in, or claims on the land, and where there were no other objections to the sale. Under this permission some twenty plots of waste land in Assam were sold at an upset price of five rupees an acre. In very few cases did the sale price go much above the minimum upset rate.

Meanwhile the Lieutenant-Governor gave much consideration to the subject of revised rules. In March 1873 he submitted draft rules for leasing and for selling waste land. At first he was disposed to recommend, in the interest of the public treasury, that waste lands should be sold subject to the liability of paying land revenue, which would be assessed there for a long term of years. But after hearing all that the tea planters' associations, other persons interested in the tea industry, and the local officers of the tea districts, had to say upon the matter, Sir George Campbell was convinced that what tea planters wanted was a fee-simple tenure without liability to land revenue, and with a clear indefeasible title to the land of their gardens; and he believed that for such a title and such a tenure intending planters would be ready to pay a reasonable price. Looking to the great importance of the tea industry, which had much money, and had drawn population into what used to be the most uncultivated, least populous, provinces of Bengal, the Lieutenant-Governor was satisfied that the Government might well concede something to tea planters, and might sell land outright for tea cultivation so long as the rights and claims of the cultivators and ancient inhabitants of the country were respected. It may be here mentioned as a fortunate circumstance for the tea industry, and for the views of Government, that in none of the tea districts had the waste lands been given away to zemindars or other large holders; that the cultivated land was occupied by ryots holding directly from Government; that there were huge areas of waste and forest; and that so long as Government reserved for the ryots their fields, their grazing grounds, and wood and water and ample space for the extension of their cultivation, the people of Assam, Cachar, and Darjeeling, would be greatly benefited, and could not be injured by the extension of tea cultivation in their neighbourhood.

Such being the state of affairs, and such being the views of Government, the Lieutenant-Governor considered that in forming new waste land rules four different classes of mistakes must be guarded against, viz.—

Mistakes to be guarded against in new rules.

- (1) The rights and claims of the resident ryots must be fully guarded, as well as all rights-of-way and user claimed by the settled inhabitants or by frontier tribes.
- (2) Care must be taken that Government does not sell to tea planters lands over which wild frontier tribes wander or claim rights, or beyond the pale of regular British administration. A tea garden with its coolies and its tea-houses, situated beyond the reach of effective British protection, is too great a temptation for the restless spirits among frontier tribes. One or two outrages on tea gardens might involve the Government in a war and the whole frontier in a blaze.
- (3) The interests of *bond fide* planters must be preserved by preventing land jobbers buying up on credit large areas of eligible waste and selling it to *bond fide* planters at five, eight, and ten times the Government price.
- (4) All waste land lots must be properly mapped and demarcated before the sale could be completed.

Under each one of these heads there had in past years been cases of serious trouble to Government and to the people, or of inconvenience to planters. In Chittagong, Cachar, and Darjeeling there had been very sad cases in which the lands and holdings of resident ryots had been sold as waste to speculators. The ryots had been ousted or compelled to pay high rents and dues for grazing and firewood, and they in their turn had taken lawless revenge by burning down tea-houses. During the last few years many cases have come to light, especially in the Darjeeling Hills, where large tracts of land suited for tea have been taken up by local speculators at the minimum price, or on lease-hold tenure, and then sold in small lots at enormously advanced price to *bond fide* planters, who were thus crippled at the outset. Tea gardens had in past years been established on the frontier, whereof the owners had been obliged to pay a sort of blackmail to the border tribes, and whereon coolies had been occasionally killed or carried away. Some of these frontier gardens actually involve the constant maintenance of strong advanced posts of military or police for their protection. As an example of the difficulties which have arisen from imperfect surveys and demarcation of waste land plots, may be mentioned the case of two holders of waste land, one of whom turned his land into a tea-garden, and the other left it untilled, hoping to sell it to advantage. The boundary between the two lots was not marked, and was but imperfectly described. The *bond fide* tea planter cultivated tea up to his supposed border, and now—seven or eight years after the sale—his neighbour claims that 87 acres of five-year old tea bushes (worth about Rs. 40,000) belong to the lot which was left unimproved, and not to the lot of the *bond fide* planter.

The draft rules submitted by the Lieutenant-Governor in March 1873 provided as far as possible for these matters. They directed that land

New draft rules. belonging to settled villages, which recently had been cultivated or shortly would be cultivated by ryots, should not be saleable as Government waste. When application is made for a plot of waste land, special inquiry is to be made on the spot whether any claims or rights in the land vest in any of the ryots or residents of the neighbourhood; all rights, if any, are to be inquired into and made clear. To prevent undue speculation, one-half of the purchase-money is to be paid within three months of the day of sale. No single lot of over 1,500 acres is to be put up for sale. Special stipulations are made regarding the survey and preliminary demarcation of every lot *before* sale, and regarding the completion of permanent boundary marks to each lot *after* sale. The sale without special sanction of any waste land outside the inner line of effective British control (as prescribed by the Eastern Frontier Regulation) is prohibited. Every plot of waste land is to be sold by public auction after full advertisement of the sale. The upset price of waste land per acre is put at rates ranging from Rs. 5 in the Sunderbunds and Rs. 8 in Assam, to Rs. 10 in the Darjeeling Hills and the Regulation Districts. But it is provided that if any part of a lot be unculturable, such portion being not more than two-thirds of the whole, may be sold at one-half of the district price. This concession is proposed because it is extremely desirable that every tea planter should have attached to his garden a certain area of grazing ground and forest land, to meet his requirements for pasture and fuel.

In submitting the draft new rules to the Government of India, the Lieutenant-Governor recommended (under date 31st March 1873) that the rules should be passed and promulgated at once, so that the extension of the tea industry might go on. He at the same time suggested that a special enactment should be passed securing the rights of Government in waste lands, and giving legal effect to the rules which might be passed; and he pointed out that the only Waste Land Act as yet passed by the Indian Legislature had operated to extinguish private rights, and to throw upon the public treasury the burden of compensating any right-holders that might make good their claims after sale had taken place. The Government of India passed orders on the draft rules (under date the 16th August 1873). They held special legislation not to be necessary; they generally approved the Lieutenant-Governor's draft rules subject to certain alterations in detail; they directed that the Government law officers should be consulted as to the best way of securing the rights of Government, and as to the form of deeds-of-sale; and they directed that the rules should be arranged so as to keep the provisions which concerned purchasers separate from those which were for the guidance of public officers. All these requirements were met, the rules were recast, and a final draft of the rules was submitted to the Government of India on the 31st October 1873. It is hoped that the new rules may soon be approved, and may be issued in time for the intending tea planters who wish to buy and prepare land next season.

In last year's report mention was made of the injustice that had been done to native occupiers by the administration of the waste land rules in Chittagong and Cachar. During the past year very close inquiries have been made into the waste land affairs of Darjeeling. It has turned out that the rights of the occupiers in the Darjeeling Hills had been in very many cases wholly ignored; ryots belonging to the tribes which had held those hills long before the British came to India, had been treated as mere squatters, whose lands could be sold over their heads to speculators as waste. In one lot a thousand acres of some of the best cultivated land in the Darjeeling district, with villages and families thereon, had been sold as Government waste land to a local speculator. In another some scores of acres of cardamum gardens, a kind of cultivation which involves much labour and expense, had been sold as waste, without reference to, or consideration for, the ryots who owned the gardens. At the same time there existed no proper maps or plans of the Government lands which had been sold, or of the Government lands which still remained; and there were no boundary marks on the ground to show where any lot ended or began. There had been left at either end of the district a considerable reserve for native cultivators, into which land speculators had not been admitted. Into one of these reserves it had been proposed that tea planters should be introduced. The Lieutenant-Governor, after visiting this tract, decided that the waste land rules should not be made applicable to it till full information is available. He arranged, with the sanction of the Government of India, for the early resurvey and demarcation of (1) all the waste land lots, (2) all the lands occupied by or required by native residents, (3) all the Government waste lands which might properly be made available for sale to *bonâ fide* tea planters. In regard to the mistakes of the past, the Lieutenant-Governor, in reporting the circumstances to the Government of India, said:—"If the hill people have no definite property in particular land, they have at any rate a right to live somewhere. Whatever injustice has been hitherto done in ousting them has, the Lieutenant-Governor hopes, been compensated by the facilities which they have for employment in the tea gardens. The people of Nepalese race (now the majority of the population of the Darjeeling Hills) readily avail themselves of this means of livelihood to the benefit of all parties under a system of free labour; they are the best tea coolies known. The Lepchas seem to be a race who must be absorbed; they take domestic service or intermarry with Bhooteahs, but they hardly ever undertake regular cultivation or labour. The Bhooteahs on this (the western) side of the Teesta find it more profitable to carry loads. On the whole therefore, though there has been some injustice, the Lieutenant-Governor takes it that not much harm has been done, and that, *per fas aut nefas*, a very excellent tea industry has been introduced. Still the Lieutenant-Governor does not think it is for the advantage either of the natives, the planters, or the public, that the natives should be deprived of all the land on which they may live on independent terms. The growth of a Nepalese population is the best surety that planters can have for labour in the future."

The Government of India generally approved these views, and it is hoped that when the survey and demarcation is finished, and the waste land sale rules are passed, the extension of the tea cultivation may go on in the Darjeeling Hills without injury to the native cultivation, and with very great benefit to the people and to the country generally.

The complications caused by the sale of settled property as waste in Chittagong have not yet been finally disposed of, but it is hoped that they soon will be.

GOVERNMENT ESTATES.

The practice of direct management of Court of Wards and Govern-

More direct management of land revenue in certain cases under Government officers.

ment estates under Government officers in preference to letting the property out in farm, which was shadowed out in

last year's report, has now been adopted, whenever possible. As far as possible, Civil Servants and other permanent officers of Government are put in charge of great estates, and not, as hitherto, gentlemen selected from outside the services. In the Patna division especially a competent Bengal Civilian, who has had experience of system beyond Bengal, has been placed under the Commissioner for purposes connected with the wards' estates. In Government estates, and as far as possible in wards' estates, the collections are made through the village headmen, and in large estates or ryotwar tracts of country, through a tehsildar, who collects directly from the headmen. It was anticipated by some that this system would be a failure, but so far as is reported it may be said to have been a complete success. It will now be firmly adhered to, and the old farming system (which was always liable to jobs and abuses) will no longer be permitted.

At pages 291-2 of last year's report was set out at length the discussion which passed regarding the sale of Government estates. Her Majesty's

Sales of Government estates.

Secretary of State has assented to the stoppage of such sales pending a full report from the Board of Revenue regarding the effects of the sale system on the wellbeing of the people, as shown by the position of the ryots on the land after it was sold to an auction-purchaser. That report has not yet been received; and during the year under report no Government estates have been sold, except small strips of ground along the railway lines which were taken up for the railways some fifteen years ago, but are now surrendered as being outside the Railway Company's fences. These petty sales were effected at favorable rates, nine strips selling at Rs. 121 per acre, or very nearly double the price originally paid for these lots when taken up for public purposes at different times from 1855 to 1863.

The question of selling Government estates has, however, now for the most part settled itself owing to the new system which has been introduced of settling direct with the tenure-holders, ryots, and others permanently interested in the lands wherever it is possible to do so. When such settlements are made there can be no occasion to sell the estates, and as it has generally been found practicable and advantageous so to settle the land, it may be said that the necessity for such sales has ceased. Seeing how much experience of the more direct management

of land benefits our officers, and how much better machinery we now have in the sub-divisional establishments than in any which before existed, the Lieutenant-Governor is strongly of opinion, that as a rule, except under exceptional circumstances, estates should not be sold, but should, as long as necessary, be nursed under direct management and then settled with the residents.

The settlement and management of Government estates for which leases have fallen in have been carried out on the principles above explained.

Management of Government estates.

Arrangements being made for realizing the Government revenue from the ryots through their headmen, they receive a small percentage on what they collect, and pay their revenue to sub-collectorate officers (tehsildars). It may be as yet too soon to speak with confidence of the actual results of the new system in Bengal; but the Commissioners and local officers appear to feel no uncertainty about its results. The Commissioner of Cooch Behar writes in June 1873:—"The year under review witnessed the introduction of the direct system of collecting revenue in supersession of the farming system. * * The collections of the year exceed those of any previous year, and this result has been arrived at without any harsh measures, not a single holding having been brought to sale for arrears of the current year. The direct system is already popular with the petty landholders, who appreciate the dignity of being the Cooch Behar Rajah's immediate tenants, and the advantage of paying their rents in open cutcherry to a responsible officer." The Commissioner of Bhau-gulpore writes of the largest Government estate in his division thus,—“That the state of the land and tenantry in the division is excellent can be determined * * as well as from this test, that whatever may stir the minds of the Sonthal population generally, the residents of the Damin-i-koh are quiet and unmoved. There is no oppression, no levying of cesses and extra dues, the rates of rent are low, and the ryots are well off.” Further, regarding other Government estates the same Commissioner writes:—"Two big estates in the district of Monghyr were brought under direct management during the year; with regard to these the district officer expresses himself in the following terms:—"There is a very general feeling of satisfaction amongst the ryots that the Binda and Kutloopore dearahs, comprising nearly 50 square miles, are to be held direct by Government. I should like to see all ryots in the country as well off as the ryots will be under Government."

In former years the whole of the ryotwaree districts of Assam

Collection of revenue in Assam.

and Cachar used to be reckoned as Government estates, because the Government revenue was collected direct from the ryots, and because the proprietary right in the land technically vested in Government. It may therefore be interesting to note that the land revenue of the ryotwaree districts of Assam, though much heavier per head of the population than in Bengal, is collected with more punctuality and absence of balance than under the permanent settlement system and the sale-law. The incidence of the land revenue and the percentage of balances in the five valley districts of Assam, as compared with the neighbouring

districts of Sylhet, Mymensingh, Dacca, and even with the rich and fertile district of Rungpore, are as follows :—

	Population.	Land revenue, current demand.	Incidence of land revenue per head of the population.			Percentage of balance.
		Rs.	Rs.	Rs.	A. P.	
Five valley districts of Assam ..	1,471,936	21,65,157	1·47=1	7	6	0·47 per cent.
Sylhet	1,719,539	4,74,941	0·27=0	4	4	28·6 „
Mymensingh	2,349,917	8,50,788	0·36=0	5	9	2·3 „
Dacca	1,852,993	4,92,775	0·26=0	4	3	5·8 „
Rungpore	2,149,972	9,74,088	0·45=0	7	2	0·76 „

Next year's report should give, when the Board's special report shall have been received, particulars regarding the Government estates still left in Bengal.

WARDS' ESTATES.

Last year a special report was called for from the Board of Revenue upon the administration of all wards' estates, the education and progress of the minors under the care of the Court of Wards, and the Board were at the same time asked to describe the condition and behaviour of some of the principal wards who had come of age and assumed charge of their estates during the last few years. The promised report has not yet been received, so no general view of the progress of affairs in wards' estates can yet be given. The reports of Commissioners in whose divisions some of the more important wards' estates are situate have been received, and it is therefore possible to give an account of the administration of some few of the larger estates.

There were altogether during the year under report 104 estates under the Court of Wards, the owners of which either are minors, or females, or lunatics, or are for other reasons unfit to manage their own affairs. Twenty-five more estates are managed by Collectors under the orders of courts of law for the benefit of the owners' creditors. The value of the estates thus under the management of Government officers may be inferred from the subjoined figures :—

Number.		Total rental.	Total revenue payable to Government.
		Rs.	Rs.
104 Wards' estates	...	55,82,405	18,83,052
25 Attached estates	...	3,71,756	1,31,101

It should be understood, however, that the rental here stated is that received by the head landlord. There are generally many valuable sub-tenures paying a Government rent, so that the actual value of the land is far greater than that shown. These estates vary greatly in size; the largest is the Durbhanga estate in Behar, which had in 1872-73 a gross annual income of Rs. 24,26,353 (nearly a quarter of a million sterling), and paid Rs. 4,17,946 as land revenue, down to little estates like that of Nursing Narain, a lunatic, in the Sarun district, which has a gross income of Rs. 193, and pays to Government an annual revenue of Rs. 80.

The financial management of the Court of Wards has for many years past been eminently satisfactory, especially in the case of large estates.

Financial management of the Court of Wards.

With small estates the percentage of charges for management necessarily increases greatly. As an instance of this success may be quoted the case of Durbhanga, which came under the Court of Wards in 1860 with very heavy debts and in much disorder. At the end of the year under review the whole debt had been paid off, the estate was in excellent order, its gross income had risen at least 20 per cent., close upon half a million sterling of savings had been invested in Government securities or in land, and from three to four lakhs of rupees a year were being laid out in roads, bridges, irrigation works, and other permanent improvements. No better testimony could be had to the native opinion regarding the Court of Wards' management than the subjoined extract from the annual report by the Commissioner of Rajshahye to the effect that—

"The estate of the late Kedarnath Mahtah came under the management of the Court of Wards at the express desire of the deceased, as solemnly expressed in his will. He was a very shrewd man of business, of more enlightened views than the generality of his class, and had in his own person the better experience of a long minority, during which his father's estates, under the nominal management of his mother, melted away under the actual management of the ordinary Dewan. He therefore anticipated the result that would follow from the management of the young widow who survived him, and showed the confidence that he had in the management of the Court of Wards by desiring that his estate should come under its control, and by limiting in every direction (save that of adoption) the powers and allowances of the widow."

As was stated in last year's report (pp. 141-42)—"These great estates were managed too exclusively on what might be called commercial principles, and the Government revenue officers, in their care for the wards' immediate interests, did not pay sufficient regard to the interests and claims of the people on the estates;" and it was stated that "the Lieutenant-Governor had sought to make these estates the models of what well managed estates ought to be in the hands of country gentlemen fulfilling their duty to the people and the country." These principles have been steadily followed out. Regarding the administration of wards' estates during the year under review, it may generally be said that debts are being paid off, organization is being introduced, and almost without exception every estate is in a better position than it was at the beginning of the year.

The weak points in our administration are that, with a few exceptions, the education of Government wards does not progress satisfactorily. These lads are usually behind boys of their own age in the schools at which they attend, and it is feared that their characters are not developing as well as might be wished. Some of this ill-success may be due to zenana influence, and to the habit whereby boys of rich families are always surrounded by servants, instead of being sent to school to make their own way with their fellows, as is the case with the sons of wealthy and titled Englishmen

at Eton or Harrow. Another drawback is that on some estates much money is still spent in litigation. Outlay of this sort has, however, been checked of late years, and the lawsuits between wards' estates and their tenants are happily extremely few.

Without attempting any full account of the general statistics of wards' estates during the year, it may be well to trace on a few of the larger estates the measures taken to give effect to the views of Government as summarised in the next foregoing paragraph. The largest estates under the Court of Wards are in Behar, and on the Behar estates, moreover, there is more scope for the operations of the managers. On the wards' estates of Bengal Proper, most of the land has been leased away in perpetuity to under-tenants, and the wards' interest is a mere rent charge. Thus on the great Paikpara estate, scattered over nineteen districts of Bengal and the North-Western Provinces, with a gross rental of Rs. 8,61,577, the manager deals directly with the occupiers of the land only on those portions of the estate which are in the North-Western Provinces; in Lower Bengal his work is mainly confined to realizing rents from under-tenants (putneedars) and spending money in improvements, such as dispensaries, roads, and village schools. But in the great Behar estates the case is different: there most of the land has never

Distinction between estates in Behar and in Lower Bengal.

been granted away in perpetuity to under-tenants, and the old system of managing these estates was to let each village or group of villages to a farmer of the revenue, sometimes a native, sometimes an indigo-planter, for a term of five or seven years, and the farmer was for the most part at liberty to work his will upon the ryots and their lands during the term of his lease. It was related in last year's report that the Lieutenant-Governor had discouraged the continuance of this system. He had directed that if villages were leased to farmers, a careful record of the rents and holdings of the ryots should be made, and farmers should be prevented from raising those rents or ejecting ryots without sanction, and that in such cases a sufficient area of grazing land should be reserved for the use of the villagers. At the same time he desired that attempts should be made to manage a certain part of each great estate direct, and to collect the rents through the village headmen by means of a paid agency something like the tehsildaree agency of the North-West Provinces. Regarding the steps taken to manage a great part of the Durbhanga estate direct, Mr. Bayley, the Commissioner, writes:—

"It was decided to make the tehsildars supervising officers, leaving the actual work of collections in the hands of the deputies, who were to give security to the amount of Rs. 5,000, and to get from Rs. 90 to Rs. 110 pay. As this change in the position of the tehsildars would very much lighten the work of supervision, he substituted for the Superintendent of Rs. 600 a month one on Rs. 250, who was to act as assistant to Mr. Llewellyn.

"While making full use of the jeyth ryots as proposed by His Honor the Lieutenant-Governor, he suggested a modification of the orders as to the putwarees, as it was considered that to place

the putwaree as assistant to the village headman would lead to constant bickering and antagonism between the two, and proposed instead the alternative system suggested in the Government order of making the putwarees responsible for the accounts and the jeyth ryots for the collections. As to the jeyth ryots (village headmen), he recommended that they should not receive a percentage on the collections in addition to the remission of rent allowed them on account of their status, but that they should forego the latter advantage in consideration of the greater remuneration they would receive from a grant of 4 per cent. on the collections.

"This scheme has hitherto worked admirably, and seems likely to prove more economical than the former plan of letting the estates in farm. The percentage formerly allowed to the farmers was 20 per cent., and the cost of the present collecting establishment is only 11 per cent. on the total income of the seer villages. This percentage will be reduced when more leases fall vacant, so that after the village expenses at 5 per cent. and law expenses, the amount of which is not known, are added to the cost of the collecting establishment, the saving will probably be at least 5 per cent., with the additional advantage that the present system is more satisfactory to the ryots. It has hitherto given rise to no complaint whatsoever except one, strange as it may appear, made by the jeyth ryots. Their grievance is, not that they should be asked to collect; that, they say, they are willing to do without further remuneration than they now receive from the reduced rates at which they are allowed to hold their lands: but that they should be asked to exchange this indirect pay for the more direct, and in most cases more lucrative, percentage. Their argument is that their rights to hold at low rates are now legalised by custom and cannot be taken from them without their consent, whereas if they renounce this right for a percentage they exchange a certain gain for an uncertain one, as no one can say whether the present system of khas collections will be continued after the minority, and if they once give up their present rights they will find it difficult to recover them. I must say myself that I think they are right, and though the assistant manager thinks that he may by degrees persuade the ryots that the proposed exchange would be for their advantage, I have reported it as my opinion that their kumshara rights (rights to hold at low rents) should not be interfered with, and I certainly think that those men who are finally selected for the work of collection should receive a small percentage on the collection in addition to the privileges they now possess."

Regarding the Kunhowlie estate Mr. Bayley writes:—

"The rents in directly managed villages in Tirhoot are collected by jeyth ryots and twelve putwarees; the former being paid from one to two rupees per month, and the latter Rs. 5 per month each, besides one pie in the rupee from the ryots. The rents are brought in for the most part by the ryots themselves to Mr. Stewart, the manager, and it is only in cases of refractory ryots that the services of the rent-collectors are as a rule wanted.

"In Gya the villages leased in farm are all let to jeyth ryots, and the manager reports that this arrangement is very popular among the tenantry."

Regarding the Hutwa estates in the district of Sarun Mr. Bayley writes :—

“As this estate will pass out of the hands of the Court of Wards next year, it has not been considered desirable to introduce the system of direct collections into it, as has been done in Durbhanga; nor was the system of management under the late Rajah such as to render such extensive and radical changes necessary for the farmers. Though through the lax working of the system they perhaps obtained in practice much more power than they were theoretically vested with, yet they were in theory little more than rent-collectors. They had no leases, and could be turned out at any moment, and were supposed only to collect the rents as stated in the rent-rolls, having the profits of the home farm, which was rated at a nominal rent for their remuneration.

“As the contractor was usually an inhabitant of one of the villages he held in farm, and acted as money-lender to the ryots, it was necessary, in order to prevent their management from becoming oppressive to the ryots, to have the rent-roll from time to time carefully revised, and to have the ryots' accounts inspected by trustworthy subordinates unconnected with the ticcadar. But during the late Rajah's time none of these precautions seem to have been taken; his sole object apparently was to get as much money as possible from his estate at the smallest possible expense, and hence the farmers who bid the highest rates got the villages, and all irregularities were winked at in order to secure the punctual payment of rents.

“During the past two years great efforts have been made to correct the rent-rolls, and the manager now reports that the volumes of rent-rolls for the past year will, when completed, show as near an approach to accuracy as we can expect without a regular village survey. These volumes he expected to have complete by the end of the hot season, as by that time the surveyors would have finished the measurement of those villages in which the returns had proved most incorrect; the total number of these villages was 53, of which 22 had been measured by the end of April, and in the remainder measurements were progressing. During the last year 24 villages have been resettled, and particular attention has been paid to the choice of farmers.”

In order to check illegal exactions on the part of farmers, the manager has begun a practice of giving to each ryot certified copies under his seal of the entries in the rent-roll affecting his holding. These extracts had been given in a large number of villages, and he hoped shortly to have completed the distribution throughout the estate.

The Hutwa estate is managed by a Covenanted Civilian of some standing, who had much experience as a Magistrate and revenue officer.

During the year under report three Government officers have been appointed to posts connected with wards' estates, on the principle indicated in last year's report (page 81). In each case the appointment has so far been justified by the result, especially in the case of the Hutwa estate. On this estate a very interesting experiment is being worked out in the indigo factories belonging to the minor. As has been explained in a previous chapter, there is

Civil servants employed on wards' estates.

this great drawback to the system of indigo culture as pursued in Northern Behar, that the ryot or cultivator has little or no interest in the success of the indigo crop, which he cultivates as one of the conditions of his tenure. In the district of Purneah, on the other hand, the ryot is paid for the quantity of indigo plant he produces, and the indigo factories there carry on their business satisfactorily without becoming farmers of the villages whereon indigo is grown. The Purneah system is now to be tried at the Hutwah factories, and, further, the manager is trying whether he cannot, without loss to the estate, give the ryot higher terms for cultivating indigo on the old system of Northern Behar. As yet the results of the Purneah system are not known, but the results of

Indigo factories in Hutwa.

giving better terms to the ryot on the old contract system are so far satisfactory.

Mr. Bayley writes on these points:—

“Besides the profits derived from rents, a considerable income is realized from the two indigo factories on the estate at Sreepore and Umbicapore, and the management of these factories has given rise to a great deal of correspondence throughout the year. The two main questions that arose were as to the rates per beegah to be given to the ryots who cultivated indigo, and the introduction of the bundle system, to which His Honor the Lieutenant-Governor wished a trial to be given.

“The first question was determined by giving the ryots Rs. 8 per beegah, and crediting them over and above the sum with the rent of the land; whereas formerly they used only to get Rs. 8-8, out of which they had to pay their rent. This arrangement, Mr. Hodgkinson reports, ‘has worked satisfactorily, and has already been adopted by two neighbouring factories.’

“But though this arrangement gave to the ryots considerable advantages over that formerly pursued, yet it was still open to the objection that it involved considerable interference with the ryot in choosing the land and inspecting the crop, and His Honor wished that a purely voluntary system should be tried, with or without advances as should be found necessary, but if advances were given the closing of all accounts within the year was to be peremptorily insisted upon.

“Mr. Hodgkinson has now proposed that during the present season he should be allowed to proceed on the system of payments according to the agreements already made for cultivation at so much per beegah, but he arranged at the same time to have the bundles brought in, weighed, and measured, in order to ascertain the rate that should be affixed per bundle in future. He was also prepared to give the ryots the option for this year of being paid per beegah or per bundle, making the *average* rate per bundle somewhat higher than the present rate, in order to induce the ryots to accept willingly a custom hitherto unknown to them.

“The proposal was acceded to, and the manager was directed to put himself in communication with Messrs. T. Mylne and Fox of the Jugdispore Factory, where the bundle system has been adopted with success, in order to make himself acquainted with all necessary details, especially as to the mode of weighing and the determination of the allowances to be made for the varying quantities of useless and useful

matter in the bundles ; in other words, of wood and leaf. During the ensuing season the bundle system will, I hope and believe, be fully and fairly used, and the result will be given in next year's annual report.

"Though the year under review was rather an unfavorable one than otherwise for indigo planters, owing to the fall of prices to 30 per cent. below these of the previous year, yet the net profit of the Hutwah factories, in spite of the increased rates paid to ryots, was Rs. 40,648-3-2 upon an outlay of Rs. 1,36,799-11-4, giving percentage of nearly 30 per cent. on outlay, representing fully a return of 25 per cent. on capital. This cannot be considered to be an unsatisfactory result, and fully shows what large profits may be made in indigo by capitalists working on their own means. The rule prescribing the closing of all accounts within ten years was rigidly carried out." Though the Hutwa estate is under the Court of Wards for only two or three years, still considerable expenditure is being incurred from the surplus of the estate on works of public utility, such as Rs. 38,000 on embankments and drainage channels ; Rs. 45,000 on wells for irrigation. On this estate the litigation is "quite insignificant, only nine suits being pending at the end of the year, and none of them being of any great importance." The young Rajah, who will not attain his majority until the end of 1874, has been put in direct charge of about one-sixth of the whole estate. By administering these villages, under Mr. Hodgkinson the manager's direction, the Rajah will, it is hoped, become imbued with the principles on which Government and the Court of Wards desire to act.

Effort is being made on wards' estates to abolish the custom of levy-

ing illegal cesses and benevolences from the ryots ; such of the cesses as are

virtually part of the rent are amalgamated with the rent itself, while the others are wholly abolished. By this means the ryot will have one sum, and one sum only to pay as rent in quittance of all demand from his landlord. The Collector of Rungpore, on reporting on one of his wards' estates, writes on this point :—

"But if no actual financial outlay has been incurred with a direct view to the improvement of the estate or the condition of the tenants, there can be no question but that they have benefited vastly by the transfer of the estate under Government superintendence from the cessation of the levy of illegal cesses. The Panga zemindars were the worst among the district landowners in this respect. From the connection of their family with the reigning dynasty of Cooch Behar, they assumed the title of Rajah, and had a throne-room for purposes of installations. They maintained a court for the trial of criminal charges, and levied a pretty good income from the fines imposed on defendants. In addition to the usual cesses elsewhere on marriage, shrads, poojahs, and the like, the Panga Rajahs levied a tax on honey, *supari* trees, and certain fruits, letting out the collection of cesses to farmers, and in the case of fruits giving the lessees the right to pluck the fruit from any tree growing on the estate,—a very oppressive and vexatious impost on the ryot. A host of burkundazes and paiks, jaghirdars employed in the collection of the rent, also fattened on the tenantry. This has been remedied and a better-ordered collecting establishment is entertained.

"As an instance of the well nigh ineradicable nature of those imposts, I quote some remarks of the Collector in 1789, when he settled some of the waste lands after the inundation and depopulation of the preceding year. He says: 'The ryots are to pay the customary abwabs upon the rates stated in this account. I was desirous of consolidating assul and abwabs in one nerick or rate, but whether on prejudice or on apprehension that such nerick might afterwards be considered as assul, and the abwabs levied upon it accordingly, I could not prevail upon them to agree to my proposal. I expect some such fear is at the bottom of the objection of the ryots to make any fresh settlement now for their excess lands. They fancy that on the estate again going into a zemindar's hand the old cesses will be levied in addition to the increased rent.'"

The manager of the Chanchal estates in the Maldah district, after giving a list of 24 cesses, which altogether amount to about 25 per cent. on the rental, writes:—

"The cesses set out above were collected as a matter of course year by year. In addition to these there were sundry irregular cesses, such for instance as a general contribution of the tenants on the occasion of a birth, marriage, and death in the family. Every elephant purchased by the late proprietor, every tank dug on the property, was the occasion and excuse for the levy of a contribution from the tenants.

"One other unique method of obtaining money practised by Issur Chunder Roy merits attention. It was the custom with the lato proprietor to expend large sums of money in the purchase of horses in Calcutta, and these, as might naturally be expected, were showy hacks of very little actual value. Many of these, through want of due care in their stables at Chanchal, and the dampness of the climate, fell hopelessly ill and became utterly unfit for useful work. So soon as one of the wretched horses reached this unfortunate condition, Issur Chunder Roy circulated throughout his estate the announcement that there will shortly be held at his house at Chanchal a monster raffle, the prizes being one or more of these horses. His intimate knowledge of the tenants of his estate enabled the zemindar to adjust the shares of the proposed contribution with the utmost nicety. Every ryot had to contribute something, but he whose lands were inadequately assessed, or whose crop for the year had been more than ordinarily remunerative, found himself saddled with the price of a larger number of shares than his less successful neighbour. The money was duly collected, and shortly afterwards the tenants were informed that the raffle had been drawn, and that the prizes had, through the unerring direction of the gods, fallen to the lot of some devout Brahmin, a piece of news no doubt comforting enough to the unfortunate ryot still smarting under the enforced dimension of his hard-earned gains. The collections under these raffles often reached, and sometimes exceeded, the sum of Rs. 4,000."

It will be a great benefit to the people, and to the estates generally, if there is a break in the continuity of the levy of cesses of this kind. Some of the cesses are, however, customary payments which the ryots are willing enough to make, and which take the place of enhancements of rent. Such cesses were indeed until very recently, levied as a matter of course from the ryots and other residents on Government estates.

CHAPTER IV.

COURSE OF LEGISLATION.

THE Session of the Bengal Legislative Council in 1872 was continued to the 27th July of that year. The Council re-assembled on the 11th January 1873, and continued its sittings till the 13th September 1873. The time of the Council was largely occupied during these sessions in the discussion of the Bengal Municipalities' Bill, of which a full account was given in the Administration Report of last year; and after that Bill had been passed by the Local Council, by the discussion and Committees on two most important Bills for Emigration and Embankments and Drainage, which have been under the careful and constant consideration of the Council. The Legislative work of the past year, though few Acts have been passed during the session, has been heavy.

Act III of 1872 was passed to indemnify the Port Commissioners of Calcutta for the acts and defaults of their officers. The same indemnity was given as that conferred by section 61 of Act XXII of 1855 to the East India Company against the acts and defaults of their harbour masters. Opportunity was taken at the same time to make some

Act III of 1872.—An Act to amend the Calcutta Port Improvement Act, being Act V of 1870, passed by the Lieutenant-Governor of Bengal in Council, and to amend Act XXII of 1855. (Received the assent of the Lieutenant-Governor on the 16th March 1872, and of the Governor-General on the 6th June 1872.)

minor amendments in the Port Improvement Act (Bengal Act V of 1870).

Act I of 1873 was passed to amend the Salt Act (Bengal Act VII of 1864). This Act was passed to put the practice in conformity with the new Code of Criminal Procedure. Its object was to give to Magistrates of the second class the same powers as

Act I of 1873.—An Act to amend the Salt Act, 1864. (Received the assent of the Lieutenant-Governor on the 13th February 1873, and of the Governor-General on the 7th March 1873.)

were given under the Act of 1864 to Magistrates vested with full powers.

These two Acts were the only Acts actually passed and assented to by the Governor-General during the official year 1872-73, but during the session of 1873 the following Acts were also passed :—

Act II of 1873, or a Municipal Amendment Act.—In the Administration Report for last year reference was made to the Bill to amend and consolidate the law relating to Municipalities. The Bill was introduced on 9th December 1871, and passed the Bengal Council after much manipulation on

the 27th July 1872. On the 30th January 1873 the assent of the

Governor-General was refused to this Bill. At the same time it was suggested that in some minor points improvements might be introduced in the Bengal Municipal Law. His Excellency the Governor-General stated his belief that under Act VI of 1868 and the District Road Cess Act of 1870, sufficient powers now existed for the introduction into Bengal of a system under which municipal and local affairs might gradually come to be administered by bodies in which the people were represented, and said that he would favorably consider any proposal which the Legislative Council of Bengal might make to amend Act III of 1864 in the same direction. It was also, in His Excellency's opinion, desirable to amend the present law so as to enable municipalities, under Acts III of 1864 and VI of 1868, voluntarily to contribute in aid of education within their districts.

A short Bill was accordingly introduced into the Council, and passed on the 5th April 1873. This received the assent of the Governor-General on the 16th May 1873, and is Act II of 1873. The changes introduced by this Act will be noticed in the chapter on Municipal Administration.

Act III of 1873.—Proposals and suggestions to amend the Excise

*Amendment of the Excise Law.
Act III of 1873.—An Act to amend
Section 9, Act XI of 1849, and Section
27, Act XXI of 1866. (Received the
assent of the Lieutenant-Governor on the
1st April 1873, and of the Governor
General on the 19th May 1873.)*

Law in Bengal have been before the Council in various shapes during the year. It had for some time past been felt that the number of shops for the retail sale of spirits and liquors had increased to an extent which was

injurious to the public interests, and that their number should be reduced. At the same time it was evident that the effect of this step would be to increase the profits of the shops to which the licenses might be continued; that these licenses would be very valuable, and that the necessity of selecting a few out of many applicants would open the door to favoritism and malpractices. With a view to prevent this, and also to protect the revenue from loss, it was resolved to adopt in Calcutta the system which has recently been introduced experimentally into some parts of the country, and of which the generally satisfactory results have been indicated in the Excise Chapter of this report, of first fixing the number of shops to be licensed, and then putting the licenses up to public competition by auction. It was found, however, that the excise law in force in Calcutta did not admit of this mode of fixing the amount to be paid for licenses. Legislation was necessary for Calcutta, though it was not needed for the interior, and the Lieutenant-Governor caused the introduction of a short Bill which should confer the necessary power on the Board of Revenue. This being arranged, it was shortly after suggested that it would be desirable to take the opportunity of providing for certain amendments of the excise law on other points, the necessity of which had at different times been brought to light. This suggestion was adopted; but it subsequently appeared that to carry a considerable Bill would entail delay, several broad and important considerations affecting the whole excise system having been suggested by members of the Council and others. As, however, it was necessary that the power of putting up the Calcutta licenses to sale by auction should be conferred

at once; the Bill was divided into two parts, the first dealing with the one point only as originally proposed, and the second embodying the other amendments of the law which had been suggested by Government at the instance of the Board of Revenue.

The first of these Bills to amend Section 9 of Act XI of 1849, and Section 27 of Act XXI of 1856, and to enable the Board of Revenue to put up licenses for the sale of spirits and intoxicating drugs to public auction, has been passed, and has received the assent of the Governor-General, and is Act III of 1873.

Further action on the second Bill, the object of which is to amend

Pending Bills to amend the Excise Laws. the excise laws, Act XI of 1849, Act XXI of 1856, and Act XXXIII of 1860, has been postponed. The proposed Bill has been published in the *Gazette*; opinions and proposals have been invited, and so the matter rests at present.

Many amendments in the excise law are certainly required. The increase of opium smuggling to Chandernagore in French territory, and to the Punjab, is described in the excise and opium chapters, and it is there shown how inadequate is the penalty for a breach of the opium law. If we are to maintain the opium system, we must prevent the infraction of the law by adequate means, and not by a fine quite disproportionate to the profit of smuggling. When communications were slow and difficult the present law might suffice, but now that they are so quick and easy, more stringent measures are essential, or a system of smuggling out to sea and to China will grow up, which, once started, will be exceedingly difficult, if not impossible, to check, and a great revenue may be sacrificed. For the rest, exclusive of minor amendments, the Lieutenant-Governor has felt that the whole subject of the excise on liquors and drugs is a most difficult one in this country, even more difficult than in Europe. His Honor has not expressed himself in favor of any measure of radical change at present, but he has pledged himself that if the Bill goes on he will consider carefully, with a full sense of the difficulty and embarrassment which attends the subject, any plan for change in the system which may be brought forward in Council.

Very recently a special Bill has been introduced into the Bengal Legislative Council to enable Magistrates of second-class powers to dispose of petty excise criminal cases which are now only cognizable by Magistrates exercising powers of the first class.

Act IV of 1873 was passed to provide the means for a complete

Act IV of 1873.—An Act for registering births and deaths. (Received the assent of the Lieutenant-Governor on the 21st April 1873, and of the Governor-General on the 26th June 1873.)

registry of births and deaths within areas to be selected by the Lieutenant-Governor. Power was also given to Municipal Commissioners in places to which Bengal Act III of 1864 (The District Municipal Improvement Act) applies, to arrange for keeping a register of births and deaths, or both, occurring within the Municipality.

Act V of 1873.—To provide for a lighting rate in Howrah. (Received the assent of the Lieutenant-Governor on the 16th August 1873, and of the Governor-General on the 13th September 1873.)

Act V of 1873 was passed to provide for the levy of a lighting rate in Howrah, in order to enable the municipal town to be lighted with gas.

The Statute 33 and 34 Vic., cap. 3, was extended in 1873 by the Secretary of State to the districts of Kamroop, Durrung, Nowgong, Sebsaugor, Luckimpore, Garo Hills, Naga Hills, Cachar, and the Chittagong Hills in the Eastern frontier of Bengal. Under the powers given by that Statute a Regulation has been drawn up by the Lieutenant-Governor and approved by the Governor-General in Council for bringing under control the commercial and other relations of our own subjects with the frontier tribes living on the borders of our jurisdiction. It is not necessary to refer to the matter further in this place, as the circumstances of the introduction of the Regulation have been dwelt on (page 64) in an earlier chapter of the present report.

The Bill to provide for embankments and drainage, referred to in last year's report, continued to occupy the attention of the Council, and was discussed with much ease both in Committee and Council, and referred more than once to a Select Committee. The Bill has at last been passed by the Bengal Council in 1873, and it is hoped that if it receives the sanction of His Excellency the Viceroy the long-vexed questions in connection with it will now have been finally settled.

An important Bill to consolidate and amend the law relating to the emigration of laborers to the districts of Assam, Cachar, and Sylhet, and to regulate contract labor and service, was introduced during the year, and much occupied the Council. The object of this Bill is explained in the chapter of this report on emigration. It is hoped that this important Bill also has now nearly reached its final stage.

Towards the close of the year 1873 a Bill was introduced which provides a system for registering Mahomedan marriages and divorces. Under this Bill the Registrar will, as regards registration, take the place which was filled by the old Kazis, who are now no longer recognized by law; and certified copies of extracts from his reports will be made *prima facie* proof of the facts recited therein. It is not proposed that there should be any compulsion or interference between the Mahomedan registrar and those who may voluntarily go to him for marriage or divorce. The reasons for the introduction of this Bill, and the whole subject generally, will be discussed in the chapter of this report on Criminal Justice.

The Bills for the recovery of land revenue in Assam, and for providing for the due appropriation of certain educational and charitable endowments, have not been further proceeded with.

The Acts passed or discussed by the Indian Legislature during the past year have not been such as to affect Bengal more than other

parts of India, and therefore need not be here discussed except the following:—

The repealing Act (Act XII of 1873).—The Lieutenant-Governor was consulted by the Government of India with reference to the laws relating to Bengal which have been repealed by this enactment, and he was able to give his general concurrence to the measures proposed.

Certain proposals of the Government of India relating to the present Law of Appeal in India have also been referred to the Lieutenant-Governor for consideration, but this subject is discussed in the chapter of this report on Civil Justice, and it is not necessary to refer to it farther in this place.

A very important Bill much affecting Bengal that has been before the Indian Legislature during the year is the proposed law known as the “Laws’ Local Extent Bill.” A draft Bill of this proposed law “to declare what parts of British India are excluded from the operation of the general Acts and Regulations, and to consolidate the law relating to the local extent of the Acts and Regulations and the jurisdiction of the courts,” was forwarded by the Supreme Government for an expression of the Lieutenant-Governor’s opinion on it.

The Bill had been materially changed by the Select Committee of the Council to which it had been entrusted, and His Honor replied that he could not altogether accept the changes that had been made in Committee. It appeared, according to the explanation now made, that when it was provided in Section 4 of the Bill that the local Government might, with the previous sanction of the Governor-General in Council, “declare what Acts and Regulations, or portions thereof, are in force in any of the excepted districts under its Government,” it was contemplated that the local Government should confine itself to declaring what enactments were actually in force in those districts, and not that it should have power to declare what enactments “are to be deemed to be in force” in such tracts. This construction of the section entirely altered the whole complexion of the case as the Lieutenant-Governor had hitherto understood it. His Honor had hoped that we were now to get rid of the doubts and perplexities and varieties in which we were involved, and that Government was to be enabled to settle the law of the excepted tracts. It was now, however, laid down by the Hon’ble Member in charge of the Bill that the Government was only to declare what the existing law was in a judicial sort of way.

The Lieutenant-Governor represented that the result of this would be, not to simplify matters, but to bring into prominence many varieties of law and difficulties which at present were to a great extent dormant. The non-regulation districts of Bengal had grown up or been pieced together through a long series of years. Each district, and even each part of a district, had a separate history of his own. There was to be found every kind of non-regulation territory, from that which differed hardly at all from ordinary

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regulation, to tracts gradually shading off into tributary or independent territory. We knew that if the facts came to be analysed, the same laws were not applicable to every part of many districts. Not only had the districts referred to grown up under every variety of law and no law, but, under the Lieutenant-Governor's immediate predecessors, several petty changes of boundary between regulation and non-regulation districts were carried out in order to round off angles or for convenience of administration, which changes would now involve very great difficulty in regard to laws. In one most important case, after a reference to the Government of India, the sub-division of Julpigoree, formerly a part of the regulation district of Rungpore, had been transferred to the Cooch Behar Division and amalgamated with our most recently acquired territory, to which the very minimum of law had been applied as yet by any competent authority, viz. the Bhutan Dooars. The whole Cooch Behar Division was in fact a perfect mosaic of heterogeneous bits of territory with entirely different histories. The Lieutenant-Governor indeed believed that it was not in the power of mortal man to say what laws were in force in each of the non-regulation districts of Bengal; while, on the other hand, this much was certain, that the varying history of the various parts of the territory involved such varieties in the local applicability of the different laws that it would be wholly impossible, with any pretence of good faith, to cut the knot by declaring precise sets of laws to be applicable in each separate tract, if the Government was supposed to act only judicially and as determining the actual facts. The first attempt to sift these facts could only lead to the disclosure of extreme divergence of law on every side.

On the whole the Lieutenant-Governor was of opinion that the Bill as now explained would do more harm

The necessity of settling the non-regulation province law.

than good. At the same time he thought that a Bill which would settle the law

of the non-regulation provinces was most urgently required. His Honor believed that the best mode of effecting this would be by enabling Government to declare once for all what laws *shall be* in force in the excepted districts, as this Bill had hitherto been understood by him to intend. The Lieutenant-Governor did not think that it would be the best way to do this by means of Regulations under 33 Vic., cap. 8. That Statute had been applied to some, but not to others, of the non-regulation provinces. That Statute was, His Honor conceived, intended merely to enable the Government to legislate in a certain form for places, and regarding matters which the ordinary Legislative Councils do not understand, or with which they could not conveniently deal. Such matters were by the Statute delegated to the local Government, and the Executive Council of the Governor-General acting in a *quasi-legislative* way. If it were intended thus indirectly to enable the Governor-General in Council to declare what laws should be in force in certain districts, it would not be giving greater power, and it would be doing the thing in a more direct and intelligible way to give the power under the Local Extents Bill; and the Lieutenant-Governor thought this should be done. He recommended that course, and hoped the Bill would be re-considered in that view.

CHAPTER V.

POLICE.

IN last year's Administration Report it was stated that the Lieutenant-Governor had, while subordinating absolutely the District Police to the District Magistrate, sought to utilise the Inspector-General's Office for bringing together and preparing for Government consideration the reports and statistics of crime throughout the country. This scheme has, it may now be said, been fairly tried, and has worked easily and well. Not only is Government kept more promptly and fully informed of serious offences when they occur, and especially of any developments of organised crime, but in quarterly abstracts Colonel Pughe has very efficiently and usefully presented for orders the most salient features of heinous crime during the year, and noted for information all points of public interest coming to light through the agency of his department. The Commissioners' Annual Crime Reports have this year, instead of being printed and reviewed apart, been taken up by the Inspector-General as they came in, and all that was valuable in them in the way of criticism and suggestion has been by him extracted and utilised in the preparation of one comprehensive report on the police and crime of Bengal. What is still, however, much wanted is that the Inspector-General's Office and the Secretariat should be under one roof, so as to diminish the amount of official correspondence and admit of ready reference and free communication. As regards the way in which things have worked in the interior, the Lieutenant-Governor believes that in respect of the reforms in this department he has carried with him the hearty concurrence of all officers of experience, and that the results have fully justified all that has been done. Some Magistrates have still a difficulty in realising that the whole body of the District Police in all grades is entirely at their disposal for all purposes, and allow technical objections to come in the way; but generally the scheme has worked well, and the police officers themselves have loyally accepted it.

The preparation of a Police Manual bringing together all the orders of Government for the guidance of the department has been under consideration. But the Lieutenant-Governor has been unwilling to press this, as the pending revision of the Police Act and other changes might make alterations necessary before long. The Inspector-General has, however, been allowed to issue on his own authority circulars codifying the existing rules on various subjects of routine and departmental economy.

The District Police of the Lower Provinces has remained on very much the same footing this year that it was last. In Assam some small saving has been effected by dispensing with a District Superintendent in the Khasi Hills, where crime was merely nominal, and by other slight reductions here and there; but at the end of the year the strength stood at 22,640 men of all ranks at an actual cost of Rs. 42,07,068. The number of men employed on general police duties was 17,262, the difference between this figure and that first mentioned representing frontier guards, jail guards, treasury guards, and such like. The cost of the force employed on purely police work was about Rs. 35,39,000, or 10·3 pie per head of the population; and the average distribution was 1 policeman to 11·7 square miles of area, and to each 3,776 of the population.

The Municipal Police of the various townships in the interior consisted of 6,516 men in all, costing Rs. 5,28,215. The average annual cost of the Town Police was 3 annas per head of the population of the towns in which they were employed, while there are eight policemen to each square mile of town area. The new Municipal Bill having been disallowed, the Lieutenant-Governor has not been able to effect the changes and economies he had proposed in the police of towns. It is to be feared that at present they are far from being an efficient or useful body. They have, it is asserted, been in most cases drilled out of their old status of chowkidar without acquiring much merit as regular police.

The Village Police has also remained in the same unsatisfactory state, and many officers have now proposed, in default of the system contemplated by the Municipal Bill, to bring them entirely under the Magistrate and District Superintendent. The Lieutenant-Governor is, however, very averse to the plan of placing a Government policeman in every village. He believes that we must sacrifice something to retain the local characteristics of the village watch. Act VI (B.C.) of 1870, which was an attempt to solve the problem by making over the assessment and collection of the chowkidar's wages to local punchayets, was introduced experimentally in a few places, and has continued to work fairly in Rajshahye, but in other districts it is reported to have failed; the complaints varying from allegations that it is impossible to get the punchayet to take any interest in the management of the system, to statements that they make the chowkidar their slave and prevent his doing any Government work. The whole question must soon be taken up afresh.

While the village watch is thus inefficient, the complaint is universal that the zemindars give the regular police no help. The Lieutenant-Governor has caused them all to be formally and fully warned of what the new Criminal Procedure Code requires of them, and it will now rest chiefly with Magistrates to see that the obligations imposed by law are duly fulfilled.

The Railway Police was entirely re-organized during 1872. Instead of two bodies of police, public and private, the whole force has in one sense been made homogeneous and available for police work, but Govern-

ment pays for a certain fixed number of men calculated with reference to the requirements of general police duty, the Railway Company paying for the rest and being bound not to reduce their numbers below a certain minimum. There are now 486 men of all ranks employed, costing Government Rs. 2,448 per mensem and the Railway Company Rs. 6,296.

Much consideration has been given during the year to the organization and equipment of the Frontier Force in Assam, Cachar and Chittagong.

Frontier and quasi-Military Police.

The Chittagong Hill Force, whose duties are exclusively military, had already been put on the footing of a frontier guard. Proposals are now under consideration for dividing the police of all frontier districts into two bodies, one for civil work and the other for guard and other quasi-military duty. The Government of India has approved of the principle generally, and the Lieutenant-Governor has considered the possibility of extending it in a measure to other districts, experience having shown that in some parts of the country the same classes of men are not suitable for guard work and for detecting crime, and that in many districts the distaste of the people for drill is so great as to prevent men who would otherwise be eligible policemen from entering the force. Mr. E. B. Baker, Deputy Inspector-General, who is well acquainted with the North-East Frontier, has been for some time on special duty inquiring into these matters.

No great recourse has been had of late to the power of quartering police on villages as a punitive measure.

Punitive Police.

The law compels the Magistrate to assess the cost of such police on all the inhabitants according to their means, thus punishing the innocent with the guilty. The Lieutenant-Governor has contemplated an amendment of the law in this respect, such as would enable the Magistrate to throw the cost on the parties or classes whose delinquency had necessitated the measure. The Police Act V of 1861 is now under revision, when this and other defects brought to light by the experience of the last twelve years will, it is hoped, be rectified.

The majority of the police of Bengal are not a warlike body of men, and 13,352 have no weapon save their baton. Fire-arms have, however,

Armament of the Police.

been given to 8,148, and swords to 1,588, and bodies of armed police did the whole work in the field of the Garo Hills Expedition, as they had before assisted materially in the defence of the Frontier of Cachar and Chittagong. Properly drilled and led, it is found that our frontier police levies are more useful in jungle warfare than regular troops, inasmuch as they move more lightly, and are accustomed to act in smaller bodies.

The rate of mortality among the force was higher than last year, 21 per thousand as against 19.

Mortality.

Hooghly, Darjeeling, and Julpigoree, were the most unhealthy districts. Dismissals were 3·3 per cent. Other

Punishments.

departmental punishments 21 per cent. on strength. Judicial punishments were 2·2 per cent. under the Police Act, 1·9 per cent. under the Penal

Code. Cases of torture and extortion were not by any means common or serious.

Education.

8,466 men of all ranks can read and write; 1,051 are under instruction.

The duty of serving processes is still a heavy burden on the police, the rules for payment of fees by parties in non-cognizable cases not

Process-serving.

yet having been brought into force. In 1872 no less than 711,812 processes were served through the police, or over 100,000 more than in 1871. The increase in the number of cases brought before Magistrates, which is noticed in the section on Criminal Justice, and which is also apparent in the statement of cognizable crime, no doubt accounts for this. It may be hoped, however, that the powers given to the courts by the new Criminal Procedure Code, of refusing summons for witnesses in petty cases, may relieve the police of much drudgery of this kind.

CALCUTTA AND SUBURBAN POLICE— ... ..	99

The police of Calcutta and the suburbs had the advantage of being supervised during the year by Mr. S. Wauchope, c.b., whose great experience and skill were devoted to reforming their organisation and rendering them in every way more efficient.

The strength and cost of the police of all kinds is shown below :—

		Rs.	
Calcutta Police, paid partly by Government and partly by the Town.	4 superintendents, 1,453 subordinate officers and men.	432,293	Including Commissioner's and Deputy Commissioner's pay.
Suburban Police, paid partly by Government and partly by the Municipality.	2 superintendents, 1,021 subordinate officers and men.	199,252	
River Police, paid partly by Government and partly by the Port Commissioners.	1 superintendent, 168 subordinate officers and men.	33,824	
Government Guards and Preventive Police under Act XIV of 1868.	400 subordinate officers and men.	66,836	
Additional constables paid for by individuals or companies employing them.	252 subordinate officers and men.	28,813	
Total ...	7 Superintendents, and 3,294 subordinate officers and men.	7,61,018	

Of the total cost, Rs. 2,84,652 falls upon Government.

The question of extending the jurisdiction of the Commissioner of Police to Howrah and the neighbourhood of Calcutta, in the 24-Pergunnahs, has been under consideration of late. The Lieutenant-Governor has, however, decided nothing. It has seemed to him that a more radical change than this is required.

Hitherto the Calcutta Police, acting under a different procedure, has been wholly distinct from the Bengal Police, and for some time past there has been in force an expensive arrangement under which Calcutta has had a very highly paid Commissioner of Police distinct from the Chairman of the Justices. The chief object of this was to obtain for a time the peculiarly valuable services of Mr. Wauchope in the former capacity. The Lieutenant-Governor has previously said that, looking to Calcutta alone, he does not advocate the separation of the offices of Chairman and Commissioner of Police, and His Honor is still of that opinion. But in considering the relations of the Calcutta Police to that of the suburban districts—in fact, to the rest of these provinces—the question has arisen whether the means at our disposal for dealing with crime would not be very materially augmented and improved by some change, which should bring the metropolitan force into closer connection with that of the rest of Bengal.

Under the system formerly in vogue, it would not have been easy, or perhaps desirable, to attempt this. The Inspector-General of Police was, as stated at pages 64 and 92 of last year's Administration Report, entirely disassociated from the control of operations relating to crime, and devoted himself mainly to supervising the discipline and finance of the department. The Lieutenant-Governor early found the need of working the department on a very different system, and he has sought, as already said, to make its head a central officer, to whom he could look to bring together the various threads of crime and police work throughout the province, and present the results in a complete shape for the consideration and orders of Government.

It is now, His Honor believes, desirable to remedy the evils that at present arise from the entire isolation of the Calcutta Police. It has been a matter of constant remark and complaint that the bad characters, who, living quietly in Calcutta, never render themselves obnoxious to the metropolitan police, find in the surrounding country a field for predatory operations, where they can practise with much impunity, while many criminals from the outside and not known to the Calcutta Police find their way to Calcutta. There is no such intimate connection between the two bodies of police as to admit of their working readily together for the suppression of crime irrespective of locality, and very serious offences have been committed in the immediate neighbourhood of Calcutta without their being detected, chiefly owing, it is alleged, to the state of things above described. In the absence of Mr. Wauchope's special position and qualifications, there is now an extraordinary want of any officer competent to trace in their ramifications in the interior crimes, political offences, and other matters having their centre in Calcutta. Besides all this, the Lieutenant-Governor has found, in dealing with the suburban crime returns, that the utmost confusion arises from the way in which the suburban jurisdiction, while under the Magistrate of the 24-Pergunnahs for judicial purposes, is under the Commissioner of police for purposes of Police. The Magistrate's figures and those of the Commissioner of Police are quite irreconcilable: one returns the cases in one way, the other in another.

The Calcutta Criminal Procedure is about to be assimilated to that of the rest of Bengal. It would be

Proposed direction of reform.

quite possible to leave in full force all the local peculiarities of the Calcutta system which it may be found desirable to maintain, and yet to incorporate the Calcutta Police in the general body of Bengal Police. It will then, as has been urged by many officers of experience, be the common object of all policemen to put down crime everywhere without any regard to the actual place of its occurrence. The police of the metropolis would work with the police of the 24-Pergunnahs and Howrah, as those of Hooghly work with those of Burdwan.

The arrangement that the Lieutenant-Governor favours would be this, that the Deputy Commissioner of Police in Calcutta should stand to the Chairman of the Justices precisely in the same relation that a District Superintendent stands to the Magistrate of his district. He would be the Chairman's subordinate for police purposes, while relieving him of all detail of police management. The Inspector-General of Police would receive from Calcutta, as from any other district, the returns and information which enable him to keep together the clues of organized crime, and to lay before Government the reports of police working in relation to crime for the whole of Bengal. In this way the Chairmanship of the Justices and the immediate control of the police would be united so as to ensure smooth working between the police force and the employés of the Justices, while for special police purposes the police working would be supervised and assisted by the officer at the head of the police of the country. The Deputy Commissioner would always be an officer specially chosen and retained in Calcutta to enable him to gain the necessary local experience, but both he and the Chairman would have the benefit of the advice of the Inspector-General of Police for Bengal, who would see that crime ramifying beyond Calcutta was properly dealt with, and that the town and country police co-operated with one another cordially and effectively. It would not be necessary to abandon any of the provisions of the local laws of Calcutta in respect of municipal offences and regulations. The Justices would still contribute their quota of the police expenditure. The change would be in fact one of the least violent possible. A few further amendments in the Calcutta Criminal Procedure Bill would be required. Any portions of the Calcutta Police Act that did not fit readily into these measures could be reproduced in a short Act of the Bengal Council.

These proposals have been laid before the Government of India for consideration.

CRIME.

The criminal returns have hitherto been found so confused and unreliable, that several changes in the

Comparison with 1871.

mode of their compilation had, as was noticed in last year's report, become absolutely necessary. These changes, though desirable and calculated to ensure accuracy in future, prevent a very close comparison of the present with past returns. This

year for instance, as compared with last, the figures for cognizable crime stand thus :—

	1871.	1872.
Cases reported	70,866	112,888
Number arrested	72,817	88,821
Ditto finally convicted	36,813	48,139
Ditto acquitted	238,05	32,563

But in this year's returns all cases reported, true or false, are included, and other corrections are required in consequence of the separation of Assam police working in 1871, the figures for Assam being again this year incorporated so that the returns now show the whole crime of the province. After all corrections, however, there is an increase of cases over 1871 of about 15,000 altogether.

The following table shows the amount of cognizable crime admitted to be true in each division of the interior compared with area and population. (The crime of Calcutta and its suburbs is treated separately.)

Divisions.	Area.	Population.	True crime to area.	Crime to population.
Burdwan	12,719	7,286,957	'9 to 1 square mile.	1 to 611
Presidency	9,607	6,097,863	1'03 to 1 "	1 to 599
Rajshahye	17,694	8,893,738	'8 to 1 "	1 to 746
Cooch Behar	8,573	958,138	'1 to 1 "	1 to 728
Dacca	22,289	9,517,498	'5 to 1 "	1 to 911
Chittagong	13,592	3,444,974	'2 to 1 "	1 to 1,352
Patna	23,732	13,122,743	'8 to 1 "	1 to 697
Bhaugulpore	18,685	6,613,358	'5 to 1 "	1 to 743
Orissa	23,901	4,317,999	'1 to 1 "	1 to 1,426
Chota Nagpore	28,482	3,419,591	'1 to 1 "	1 to 871
Assam	27,307	1,682,602	'09 to 1 "	1 to 685

The table below shows the number of cases reported and accepted as true in each division for the past year as compared with the returns of the preceding year; it also shows the percentage of cases declared to be false to cases reported.

Divisions.	TRUE CASES.		Total number of cases reported in 1872.	Number declared false in 1872.	Percentage of cases declared to be false to cases reported in 1872.
	1871.	1872.			
Burdwan	10,019	11,923	15,344	3,331	21·7
Presidency	9,347	10,180	13,868	3,088	22·3
Rajshahye	8,647	11,913	15,774	3,861	24·4
Cooch Behar	1,344	1,315	1,657	343	20·8
Dacca	9,159	10,446	17,213	6,766	39·3
Chittagong	3,102	2,547	4,046	1,499	37·0
Total	40,618	48,324	67,201	18,871	28·0
Patna	17,904	18,810	21,489	2,879	13·5
Bhaugulpore	6,697	8,999	10,949	3,060	27·9
Total	24,601	27,709	32,438	4,729	14·5
Orissa	2,470	3,028	3,785	757	20·0
Chota Nagpore	5,831	3,927	5,010	1,055	21·0
Assam ... ..	.....	2,657	4,449	1,792	40·3
Grand Total	71,820	66,645	112,683	27,338	24·1

The above table exhibits an apparent increase of crime in nearly every division. This is attributed to the growing independence of the people, who now resort more freely to the courts instead of to their landlords to settle their differences. Something is also to be set down to greater activity and more vigorous supervision by the Magisterial authorities. As the Police improve, reports of crime that would heretofore have been unnoticed come in to swell the returns.

Very much, however, of the increase is only apparent, arising from the more comprehensive nature of the present returns. It has been discovered, for instance, that in former years some District Police reports entirely ignored cognizable cases taken up by the Magistrates. As the present returns pass through the Magistrate's hands and are submitted by him, all cases are necessarily included. We are only now, and even yet very imperfectly, getting to a knowledge of things as they really are in connection with the police and criminal administration of the country.

It is interesting also to note the degree to which cases are reported to be false, in the eastern districts and in Bengal Proper as contrasted with Behar. Assam has the bad preëminence of returning 40 per cent. of its reported crime as entirely false. Of the general character of the cases that turn out false, it may be said that they are as a rule vexatious charges, petty assaults magnified into thefts, civil disputes distorted into criminal offences, cases of hurt set up to try questions of possession, matters of disputed inheritance brought forward as criminal breaches of trust.

The following return shows the number of cognizable cases reported in each district, the number declared false, the percentage of cases convicted to true cases, and the number of true cases to the population. Nuisance cases have been excluded.

Division.	District.	Area.	Population.	Number of cases reported.	Number declared false.	Number of cases in which convictions were finally obtained.	Percentage of cases convicted to true cases.	Number of cases convicted to population.	Number of true cases to population.
Burdwan	Burdwan	3,523	2,034,745	2,817	949	690	36.9	1 to 2,948	1 to 1,089
	Bancoorah	1,346	523,772	953	174	210	26.9	1 to 2,508	1 to 878
	Beerbhoom	1,344	695,821	1,535	428	219	19.7	1 to 3,177	1 to 627
	Midnapore	5,982	2,540,903	4,127	804	1,308	39.3	1 to 1,942	1 to 784
	Hooghly	929	862,081	2,130	417	425	24.8	1 to 2,100	1 to 521
	Howrah	495	595,865	1,708	532	528	44.8	1 to 1,128	1 to 508
Presidency	24-Pergunnahs	2,788	2,657,648	4,190	905	1,645	50.5	1 to 1,615	1 to 816
	Nuddas	5,421	1,812,795	3,863	959	717	24.6	1 to 2,528	1 to 634
	Jessore	3,555	2,075,081	4,587	1,202	908	36.9	1 to 2,297	1 to 618
Rajshahye	Moorshedabad	2,572	1,253,626	2,815	681	544	24.3	1 to 2,485	1 to 605
	Dinagapore	4,126	1,501,824	1,558	350	415	33.5	1 to 3,619	1 to 1,245
	Maldah	1,813	676,426	906	289	232	33.2	1 to 2,915	1 to 970
	Rajshahye	2,234	1,310,729	2,741	880	566	28.9	1 to 2,315	1 to 555
	Rungpore	3,476	2,140,972	1,923	915	353	34.9	1 to 2,107	1 to 2,132
	Bograh	1,501	689,407	1,300	536	191	25.0	1 to 2,609	1 to 903
	Pubna	1,966	1,211,594	2,629	680	288	16.4	1 to 4,306	1 to 692

Division.	District.	Area.	Population.	Number of cases reported.	Number declared false.	Number of cases in which convictions were finally obtained.	Percentage of cases convicted to true cases.	Number of cases convicted to population.	Number of true cases to population.
Cooch Behar...	Darjeeling	1,234	94,712	372	54	119	37'4	1 to 795	1 to 207
	Julpigoree	2,906	418,665	543	99	143	32'0	1 to 2,927	1 to 938
Dacca	Dacca	2,897	1,852,993	3,012	1,142	472	25'2	1 to 3,926	1 to 990
	Furreedpore	1,496	1,012,589	1,801	129	277	15'9	1 to 3,355	1 to 584
	Backergunge	4,895	2,377,439	6,054	3,821	407	18'2	1 to 5,841	1 to 1,064
	Mymensing	6,293	2,349,917	2,460	1,184	207	20'8	1 to 8,801	1 to 1,833
	Sylhet	5,983	1,719,539	2,501	333	465	20'6	1 to 3,697	1 to 771
	Cachar	1,285	205,027	932	141	167	21'1	1 to 1,227	1 to 259
Chittagong	Chittagong	2,468	1,127,402	1,325	757	241	42'4	1 to 4,078	1 to 1,984
	Noakhally	1,537	713,934	873	205	150	25'0	1 to 4,076	1 to 1,174
	Tipperah	2,055	1,333,981	1,760	405	357	27'5	1 to 4,296	1 to 1,184
Patna	Patna	2,101	1,559,638	3,793	290	1,148	33'1	1 to 1,358	1 to 450
	Gya	4,718	1,940,750	4,070	504	545	15'2	1 to 3,077	1 to 545
	Siababad	4,385	1,723,074	2,848	662	541	24'6	1 to 3,186	1 to 754
	Tirhoot	4,349	4,384,706	4,341	940	1,167	31'3	1 to 3,767	1 to 1,289
	Sarun	2,654	2,063,860	3,847	178	610	16'8	1 to 3,334	1 to 508
	Chumparun	3,531	1,440,815	1,441	168	373	29'3	1 to 3,962	1 to 1,131
Bhaugulpore... ..	Monghyr	3,913	1,812,086	2,629	803	689	29'6	1 to 2,631	1 to 781
	Bhaugulpore	4,327	1,826,290	2,248	621	502	29'1	1 to 3,638	1 to 1,059
	Purneah	4,957	1,714,795	2,819	1,100	331	19'2	1 to 5,180	1 to 897
	Sonthal Pergunnahs	5,488	1,259,287	2,983	116	806	28'1	1 to 1,562	1 to 439
Orissa	Cuttack	3,178	1,494,784	1,428	386	353	33'9	1 to 4,234	1 to 1,434
	Pooree	2,473	769,674	742	154	187	31'8	1 to 4,115	1 to 1,308
	Balasore	2,066	770,232	947	170	378	40'0	1 to 2,037	1 to 999
Chota Nagpore	Hasareebanagh	7,021	771,875	1,415	397	332	32'6	1 to 2,324	1 to 758
	Lohardugga	12,044	1,237,123	934	144	383	48'4	1 to 3,230	1 to 1,585
	Singhbhoom	4,503	415,023	285	45	124	51'8	1 to 3,347	1 to 1,729
	Maunbhoom	4,914	905,570	2,067	490	410	26'0	1 to 2,428	1 to 633
Assam	Goonparah	4,433	444,761	648	189	123	26'7	1 to 3,616	1 to 908
	Kamroop	3,031	561,681	1,146	588	198	35'4	1 to 2,836	1 to 1,006
	Durrung	3,413	236,009	673	291	177	51'1	1 to 1,333	1 to 632
	Nowgong	3,648	256,390	672	406	123	46'7	1 to 2,064	1 to 974
	Seebasaur	2,413	206,580	940	389	141	26'0	1 to 2,103	1 to 548
	Luckimpore	3,145	121,267	328	73	111	43'5	1 to 1,092	1 to 475

The differences are very remarkable. While the 24-Pergunnahs show 50 per cent. of convictions and Midnapore 39'3, Beerbhoom, Purneah, Backergunge, Sarun, Pubna, Furreedpore, and Gya, are all under 20 per cent., the latter district falling as low as 15'2. Again, while Rungpore has one true case to every 2,132 of the population, Mymensing one to 1,833, and Lohardugga one to 1,565; Gya has one to 545, Hooghly one to 521, and Patna one to 450.

Of the 112,883 cases reported, 11'1 per cent. were not inquired into by the police. The law permits the police to refrain from inquiry in certain cases, and it is certainly advantageous to do so in petty matters when no one is charged or particularly suspected; but there is a great diversity of practice in this respect, though strangely enough it is not found to affect the percentage of convictions in the different districts.

Eighty-one thousand three hundred and thirty-three cognizable cases were before the Magistrates for trial, and convictions were obtained in 35.5 per cent., nearly 4 per cent. more than last year. 80,702 persons were put on trial, of whom 59.5 per cent. were finally convicted and 41.5 per cent. acquitted. A memorandum of arrests and convictions, with the proportions of the same in the several districts, is attached.

DISTRICT.	NUMBER ARRESTED		CONVICTED		ACQUITTED.		Percentages of acquittal to men brought to trial.
	By Police.	By order of Magistrate.	By Magistrate.	By Sessions.	By Magistrate.	By Sessions.	
Burdwan	2,900	615	1,940	55	1,353	05	43
Bancoorah	617	91	408	44	230	15	36
Beerbhoom	531	44	483	15	417	31	47
Midnapore	2,167	1,014	1,813	52	1,255	71	43
Hooahly	1,489	501	1,034	30	783	44	43
Howrah	2,289	290	1,701	32	655	32	25
24-Pergunnahs	3,847	406	3,046	80	027	61	24
Nuddea	1,670	930	1,303	44	1,006	64	46
Jessore	2,503	846	1,824	94	1,341	96	43
Moorshedabad	1,754	1,250	1,102	59	1,529	129	53
Dinagapore	2,291	288	1,012	125	415	44	18
Maldah	013	212	400	43	251	24	35
Rajahmhye	1,200	618	1,059	49	591	23	36
Bangpore	859	322	600	69	459	23	41
Bograh	496	137	311	17	207	28	41
Pubna	871	371	500	27	551	50	59
Darjeeling	323	69	228	4	176	5	30
Julpigoree	315	211	276	13	229	5	58
Gonpara	394	130	275	13	229	5	46
Dacca	1,816	845	1,308	37	1,089	127	50
Furzedpore	658	090	033	84	634	44	46
Backergunge	1,385	1,486	2,031	150	1,411	205	57
Mymensing	788	718	032	65	684	89	63
Sylhet	1,961	902	1,320	43	477	38	47
Cachar	423	174	345	3	219	12	40
Chittagong	700	047	722	34	434	24	38
Noacolly	416	498	451	45	545	43	44
Tipperah	1,290	518	2,006	50	671	35	59
Patna	2,501	424	2,137	45	817	34	21
Gya	1,389	363	706	55	551	45	40
Shahabad	1,621	915	1,148	51	895	62	45
Tirhoot	2,046	1,143	1,890	43	1,105	32	37
Saran	1,418	493	988	29	729	30	43
Chumparun	721	157	559	23	277	13	33
Monghyr	1,653	421	1,147	51	621	41	36
Bhaugulpore	046	207	094	21	428	12	38
Purneah	1,020	1,156	064	21	1,396	40	09
Sonthal Pergunnahs	848	1,812	1,453	45	982	43	41
Cuttack	802	436	659	12	520	27	46
Poorce	090	448	585	14	391	12	40
Balasore	720	369	581	36	443	9	42
Gurjhat	298	36	136	11	54	.....	27
Hazareebaugh	1,110	396	900	34	990	26	31
Lohardugga	731	321	829	47	385	42	36
Singhbhoom	409	25	255	3	73	4	23
Maunbhoom	1,093	82	662	61	414	23	33
Kamroop	815	379	776	9	391	3	33
Durrung	446	67	415	9	81	4	17
Luckimpore	879	146	195	9	219	4	33
Seebesugor	491	235	464	15	182	7	23
Khasi and Jynteah Hills	50	10	44	2	21	.....	31
Nowgong	265	184	248	20	131	10	34
Naga Hills	27	13	29	.....	5	.....	16

Purneah, Moorshedabad, Backergunge, Mymensing, Furzedpore, and Pubna, show very badly in these returns. The Dacca division is the worst of all the divisions; looking to results, half the persons arrested in that division having been acquitted. Dinagapore, which

used to be a very unsatisfactory district, has, under energetic management, come to the front rank; its convictions being 2,037 out of 2,579 arrests. The Behar districts generally show fair returns, though more arrests per case on the average are made there than elsewhere.

The following table shows the number convicted and acquitted in cognizable cases by the Sessions Court in the several provinces:—

PROVINCES.	Convicted.	Acquitted.	Percentage of acquittals to number tried or appealed.
Bengal	1,372	1,445	51
Behar	392	355	46
Orissa	73	48	39
Chota Nagpore... ..	135	100	42
Assam	60	38	40
Total ...	2,032	1,986	49

In Bengal the acquittals are far the most numerous. In Orissa and Assam the results are fairly satisfactory.

The table below gives the number of cases reported under the different classes of crime in 1870, 1871, and 1872, exclusive of false cases:—

	1870.	1871.	1872.	Number rejected as false not included in the last column.
<i>Under Penal Code.</i>				
Class I.—Offences against the State, public tranquillity, safety, and justice.	2,086	3,231	3,120	1,595
Class II.—Serious offences against the person	3,188	3,730	4,081	2,093
Class III.—Serious offences against person and property, and against property only ...	13,313	15,086	20,210	3,159
Class IV.—Minor offences against the person ..	1,855	3,092	3,994	3,163
Class V.—Minor offences against property ...	27,991	35,250	38,767	16,858
Class VI.—Other offences not specified above .	3,681	10,156	14,497	858
<i>Under other special laws</i>	619	320	599	7

Here there is a large increase in classes III, V, VI, even after the false cases have been struck off.

For rioting 5,957 persons were punished, nearly 1,000 more than last year, though there were fewer cases. Most of these cases arise out of land disputes, and are a pretty sure index of disturbed relations between ryots and landlords, or of family quarrels between the co-sharers in large estates. In Pubna, Jessore, Backergunge, Mymensing,

Rioting, &c.

Tipperah, and Dacca; riots of this character were not uncommon. Sylhet is also a district noted for this crime, though held entirely by petty proprietors, but the people there are said to be peculiarly excitable and hot-headed. The riots in Backergunge are more serious in their character than those of other districts. Loss of life occurred in 12 of those in that district.

Of murder there were 394 true cases reported; of these 160, or 40·5 per cent., only were detected, and though 1,100 persons were arrested, only 328, or 29·8 per cent., were convicted. Twelve were murders by dacoits, 18 by robbers (chiefly murders of children for their ornaments), 16 were murders by poison, all domestic crimes; 327 were ordinary murders.

The exciting causes cannot always be ascertained; but it may be noted that 72 wives were murdered by their husbands; 18 husbands were murdered by their wives or the wives' paramours; 43 paramours were murdered by the husband or relatives; 8 women were murdered by their relatives on account of intrigues; 30 persons were killed in riots, generally land disputes; 24 children were murdered for the sake of their ornaments; 11 illegitimate children were made away with; 9 people were killed by lunatics; 112 persons were murdered in various ways not detailed in the reports.

Backergunge, Mymensing, Sylhet, and the Sonthal Pergunnahs, take the lead in this crime. Comparing the number of murders with the proportions of the various classes of the population in each division, it is found that they are fewest where Hindoos predominate, most frequent among aboriginal races, and next to that among Mahomedans. Culpable homicide cases do not follow quite the same rule as murders, inasmuch as they frequently arise out of sudden quarrels, and occur in connection with riots and without premeditation. Hence some decidedly Hindoo districts figure largely under this head. There were 234 true cases in 1872, 41 per cent. of which were detected.

The existence of gangs of professional poisoners has now and again been manifest in Bengal, and much attention has been given to tracing and breaking up these associations, which in fact now-a-days take the place of thuggees. Only 17 cases of drugging appear, however, in the returns for 1872, and only 5 of these were suspected of being professional, and in 3 convictions were obtained.

Kidnapping and abduction figure largely in the returns, but of 441 cases reported, 233 were declared false, and only 56 were sufficiently supported to warrant committal. These charges are often false. The customs of polygamy and early marriage give rise to frequent disputes as to the possession of the children or as to the disposal of a girl in marriage. In the greater number of instances the origin of the case was either a wife running away with her paramour, or a girl taken with the object of marrying her to some one other than the child her guardians had selected. In these latter cases proof is often difficult to obtain, as the quarrel is between members of the same family, and it is hard to say when the criminal intention commences.

There is one form of kidnapping, or abduction, which is however of not uncommon occurrence—that by recruiters for the emigration

agencies. The Government has been doing what it can to strike at the root of this evil by enforcing more stringent examination of the characters of recruiters before they are licensed, and giving the Magistrates of districts power to refuse to allow disreputable men to recruit.

Turning to serious offences against property, the following table shows the increase and decrease under the principal heads of crime as compared with 1871:—

	1871.	1872.	Increase.	Decrease.
Dacoity	338	313	0	25
Robbery	322	306	0	16
Serious mischief	573	723	150	0
Receiving stolen property by dacoity	22	27	5	0

Of dacoity, 97 cases only were detected. Dacoities are generally of three kinds: (1) those committed by professionals; (2) those committed by local bad characters often employed by receivers; (3) those committed by unpractised men, driven to bad courses by want. Dacoities of the first class are by no means very common now-a-days, though organised gangs are occasionally formed. The great majority of cases in ordinary years fall under the second head, and the best way of dealing with them is found to be by preventive action and keeping a close watch on the bad characters, exacting security from those who are known to be leaders. The police are not successful in dealing with dacoity cases or robbery cases when they do occur, as will be seen from the following table, which shows district by district the number of true cases with the number in which convictions were obtained and the number of persons ultimately convicted and acquitted at the Sessions:—

DIVISION.	District.	Cases reported and accepted as "true."	Cases in which convictions were obtained.	Number of persons convicted.	Number of persons acquitted.
BURDWAN	Burdwan	14	5	21	25
	Bancoorah	13	5	23	4
	Beerbhoom	2	...	...	4
	Midnapore	17	4	16	13
	Hoochly	14	2	12	7
	Howrah	12	3	4	7
	Total	72	19	78	75
PRESIDENCY	24-Pergunnahs	9	5	40	9
	Nuddea	4	2	7	19
	Jessore	1	1	11	15
	Total	14	8	58	43
RAJSHAHYE	Moorahedabad	23	3	27	20
	Dinapore	16	7	54	20
	Maldah	9	6	28	19
	Rajshahye	2	1	6	...
	Rungpore	8	4	24	8
	Bograh	4	1	1	6
	Pubna	5	4	12	8
	Total	67	31	152	86

DIVISION.	District.	Cases reported and accepted as "true."	Cases in which convictions were obtained.	Number of persons convicted.	Number of persons acquitted.
COOCH BEHAR ... {	Darjeeling	1	...	...	...
	Julpigoree	2	1	5	...
	Gaolparah	1	...	...	...
	Total	4	1	5	...
DACCA ... {	Dacca	7	...	6	...
	Furzedpore	2	1	12	10
	Backergunge	12	5	14	33
	Mymensing	5	2	11	12
	Sylhet	4	1	4	...
	Cachar	1	...	...	...
	Total	31	9	47	55
CHITTAGONG ... {	Chittagong	2	...	...	10
	Tipperah	2	3	9	...
	Noacolly	1	1	1	1
	Total	5	4	10	11
PATNA ... {	Patna	4	1	3	...
	Gya	16	4	12	1
	Shahabad	9	4	16	1
	Tirhoot	1	...	...	...
	Sarun	5	1	1	4
	Chumparun	4	...	...	...
	Total	30	10	31	6
BHAUGULPORE ... {	Monghyr	3	1	9	16
	Bhaugulpore	10	1	2	7
	Purneah	12	3	5	16
	Sonthal Pergunnahs	7	1	15	19
	Total	32	5	31	58
ORISSA ... {	Cuttack	2	...	...	...
	Pooree ... ..	...	...	...	...
	Balasore	5	5	12	8
	Gurjhat ... ..	...	...	...	...
	Total	7	5	12	8
CHOTA NAGPORE ... {	Hazareebhaugh	22	2	7	8
	Lohardugga	5	...	...	4
	Singbhoom	1	...	...	...
	Maunbhoom	14	5	20	21
	Total	42	7	27	33

The Inspector-General of Police remarks :—

As regards professional crime, in the old definition of the term,

Professional crime and criminal classes. which embraced thugs, dacoits, and men who made a trade of poisoning and robbing, such can now scarcely be said to exist in Bengal. It is true that in some few districts, such as Midnapore and Hooghly, there are men who formerly gained their living by dacoity, some of whom have returned from transportation, who are always ready, when opportunity and associates offer, to return to their old habits; and as this is a crime which requires much deliberation and planning, it must be designated as organized crime; but it is scarcely an exaggeration to say that the regular bands, who solely lived by such plunder, and overran the districts of Jessore, Midnapore, &c., have ceased to exist.

In the great district of Tirhoot, it is rare to hear of such an offence, and in Jessore, where fifteen years ago the crime might almost have been counted by hundreds, there is scarcely one. There are still certain villages in Ghazee-pore, and perhaps one or two in Shahabad, inhabited by Binds, which supply men who committed this crime in Bengal even so far down as Mymensingh, but they are well known, and from information received from the North-West authorities certain parties who had perpetrated dacoities in Maldah, Purneah, &c., were arrested in Rajmehal and also in Mymensing. The only professional criminals are the Bedyahs of Nuddea and Jessore; they are small in number, and confine their attentions to thefts and petty burglaries. Cases of serious mischief are shown to have increased, while the number of cases successfully prosecuted is less, being only 165 out of 723.

Cases of serious mischief have increased, while the number of cases successfully prosecuted was only 105 out of 720. Many of these offences, especially in Chittagong and Backergunge, are cases of arson; elsewhere they relate chiefly to damage done to roads and obstructions of paths and watercourses. In Chittagong a special police had to be employed to repress the mania for incendiarism which seemed to rage in that district.

The following gives the number of minor offences against property reported in the two previous years as compared with 1872, with the cases not inquired into, those detected, and number of convictions obtained :—

		Cases reported.	Not inquired into.	Cases detected.	Number convicted.
1870 ...	...	39,992	9,807	11,004	14,593
1871 ...	...	48,763	9,864	10,141	15,310
1872 ...	...	57,632	6,149	12,508	19,812

The addition of Assam to the returns will only account for 1,500 additional cases, whereas the excess is nearly 9,000. The convictions, however, are more than proportionate. The excess is under all heads.

The extraordinary prevalence of the crime of petty house-breaking in Behar is what chiefly swells this return. The police fail entirely in dealing with this crime, and probably will continue to fail until a proper system of village chowkidars is discovered. In some districts inquiry into very petty cases of this class has been discouraged as useless. After all, however, the police in Bengal are at least as successful as the police of London. The following is a list of the number of cases corresponding with lurking house-trespass and thefts, which occurred in London during the years 1869, 1870, and 1871, with the numbers apprehended and the numbers convicted :—

	Cases reported.	Apprehended.	Convicted.	Percentage of conviction to cases.
1869 ...	14,249	8,211	2,318	or 16 per cent.
1870 ...	12,226	2,783	2,027	or 16 "
1871 ...	10,800	2,575	1,884	or 18 "

We show during the past year 45,906 cases of this description, and 11,510, or 25 per cent., convictions. It is scarcely necessary to point out the additional obstacles placed in the way of detecting crime in this country, owing to the habits of the people, in comparison with those against which the London police have to contend.

Cattle theft shows an increase of 500 cases, there being 2,113 true cases reported. Convictions were obtained in 989, against 735 in 1871.

This crime also is to a great extent peculiar to some districts of Behar, and there is much difficulty in prosecuting offenders, as the owners of cattle prefer generally to get back their beasts privately by arrangement with the thieves.

The year 1872 was marked by increased activity on the part of Magistrates in dealing with bad characters, 2,940 cases having been taken up against such in lieu of 1,695 in 1871. The Mugheya Domes of Tirhoot and Chumparun, and the Rajwars of Gya, were specially looked after, and the police generally have been stirred up to a sense of the importance of knowing thoroughly all their disreputable neighbours. The Lieutenant-Governor has, however, warned Magistrates to take care that the power of arresting so-called bad characters is not abused.

Railway cases.

The Railway Police worked well, obtaining convictions in 654 out of 880 cases reported.

The Salt Preventive Police had to deal with an increase of nearly 70 per cent. in the number of cases, or 1,972 in all; but they got convictions against 2,059 of 2,244 persons arrested.

Salt cases.

On the whole, as regards the general working of the police in Bengal, the Lieutenant-Governor is disposed to agree in the main with the Inspector-General and some of the Commissioners, that though very far from perfect, the force is sometimes rather hardly dealt with. As the Commissioner of Patna writes :—

“ No doubt, compared with the actual amount of crime, the results of convictions are petty and insignificant; and even the most energetic

Estimate of the Bengal Police.

Magistrate may be excused for occasionally despairing of any effectual head being made against the mass of crime with which he has to contend. No doubt also the detective ability of the police has hereafter to be developed. Worst of all, the police have not the confidence of the people. It is bad for a man to be robbed of his brass vessels worth Rs. 10, but it is worse to have to spend another Rs. 10 in *douceurs* and continual harassment, delays and absences from home, in the endeavour to get the thief punished. Admitting all this, I think the general tendency is to be unduly hard upon the police. We say, and I often say myself, ‘ the failure in such and such a case is discreditable,’ and their ability to deal with such a crime is lamen-

table. So it is, judged by the standard we set up for them, but I think our standard is higher than we have any right to expect. I should be very glad if I could improve the police of the worst districts in this division up to the standard of the best, to bring Gya (say) up to the standard of Tirhoot (and this would involve their being more successful nearly a hundred per cent. than they are at present), but when that is done one's ideal standard would be almost as far off as ever; one still would lament the deficiencies instead of congratulating oneself on the very real step attained. So I think we may fairly see in the work that is done, in the narrow limits within which dacoities and audacious cattle robberies and other crimes of violence are confined, a fair proof of the useful work the police are doing.

"Then, too, the distrust of the police is natural, and perhaps our judicial system, inelastic as it is on matters of evidence, may be a further obstacle for them to overcome; but the apathy or distrust of the people does not originate in that, nor in any special characteristic of the police. The police, we are told, are corrupt—extortioners, torturers, and what not. But where are better materials to be had? As are the people, so are the police, who are of and from the people. If centuries of experience have convinced the people of India, as well as all Asiatics, and even some European Natives also, that power is to be used first for one's own benefit, and the public employment means power to oppress and to grow rich at the expense of the public, is it to be wondered at that we have hitherto failed in eradicating this view from the mind of the Hindustani or Bengalee constable? If his censors and accusers in a similar, or indeed in higher, positions of life, were to change places with him, nine-tenths of them would do the same things themselves. They would demand a present for every inquiry, would expect to be fed and feed, would not scruple to put pressure on suspected persons to make them confess, and would be supported by the knowledge that they were acting in accordance with the public opinion of their time and country. People do not help the police nor come to them freely, because they run the risk of harassment, expense, and annoyance, and they have not learned that it is worth while to suffer these things for the public good; but I do not think they look upon a successful policeman as at all less worthy of respect because his success is the outcome of these practices. It is assuredly our duty to suppress these practices, and to leave no doubt that, however consistent with the customs and beliefs of centuries, we at least cannot tolerate them; and in this respect it is my opinion that the police are improving. They are more carefully supervised, and have more dread of punishment before their eyes. I have marked the shortcomings of the police, and have confessed myself very dissatisfied; but I would urge that we are apt to judge them by too high a standard, that we cannot expect them to rise above the level of the morality of their class and time, and finally that in the apathy of the people, in the complicity of many landowners, and in the want of a connecting link with the criminal classes, they have very much to contend against. Our progress is small perhaps, but I believe it is progress, and am not inclined to despise the day of small things."

CRIME IN CALCUTTA AND THE SUBURBS.

In the town of Calcutta itself there were reported, during the year 1872, 38,879 cases of all kinds, of which 1,604 were struck off as false. Excluding false cases, this gives an increase of 9,408 cases over the number in 1871. Convictions had, at the same time, risen from 27,536 to 34,629. The increase appears to have been almost entirely caused by greater activity on the part of the municipal authorities in the prosecution of cases under conservancy and local laws. The great bulk indeed of the cases that figure in the statements were offences against special or local laws, for the total number of Penal Code offences of all kinds was only 9,475 as against 8,184 in 1871.

In Penal Code offences there was an increase of 1,291 cases over 1871, but in cognizable offences the increase was only 108 cases; while there was a decrease in the arrests from 5,518 to 5,351, and an increase in convictions from 3,415 to 3,737. The results as regards the police were not therefore by any means unsatisfactory. There was in fact a decrease in thefts from 2,303 to 2,173, and in serious offences against property from 218 to 121. There was a singular absence of violent crime, and not a single murder occurred in Calcutta during the year.

Under miscellaneous Acts there were 12,941 cognizable offences, in which 17,320 persons were arrested, of whom no fewer than 13,139 were convicted, 1,578 being acquitted, and 2,836 released by the Commissioner summarily. There was a great increase in gambling offences, from 188 to 346; in excise cases from 44 to 109; in street offences from 5,037 to 7,998; and in offences under the Contagious Diseases' Act from 772 to 1,098. As regards the last-named class, however, of the 1,713 persons arrested, 1,602 were released by the Commissioner without being sent before a Magistrate. Most of the cases were brought in the course of the executive working of the Act merely to compel observance of its provisions, and the Commissioner was able to deal with them summarily.

Of the total of 19,593 non-cognizable offences, in which 20,808 persons actually appeared before the courts, 17,977 were conservancy or nuisance cases, disposed of principally by Honorary Magistrates, who convicted 12,787 persons.

From the above figures it is manifest that most of the crime which engages the attention of the

Character of the crime of Calcutta.

Calcutta courts is not of a heinous character. Comparing the returns with the census report, it would seem that the Jews furnish more criminals in proportion to population than any other race, giving 5·3 per cent., the Mahomedan furnishing criminals at the rate of 3·1, Europeans and Eurasians 2·7, and the Hindus 1·4 per cent. of population. It is explained, however, that 17 out of the 28 Jews were only guilty of nuisance. The Mahomedans supply in proportion to their numbers double the number of thieves that the Hindus do, and are guilty of more than double the number of assaults.

In the suburbs the total number of cases was 8,674, of which 568 were struck off as false. This was a considerable increase over the number (5,888) in 1871, but here too the increase is chiefly in offences against special and local Acts. There was an actual decrease in offences under the Penal Code from 2,661 to 2,560. In cognizable cases the decrease was 107, and arrests had fallen from 1,780 to 1,535, while convictions had only fallen off by 11, or from 741 to 731. The decrease is apparent in rioting, grievous hurt, kidnapping, and theft. But burglaries had risen from 69 to 119.

In cases under local Acts, conviction was, as usual, the rule, 2,774 persons being punished to 204 acquitted.

In the non-cognizable table the cases were 4,534 against 2,217 in 1871, but this increase was entirely due to conservancy cases.

As regards nationality of offenders, the same feature distinguishes the suburban as the city return, viz. the preponderance of Mahomedans. It is noticeable, however, that offences against marriage are not so common here as in parts of Eastern Bengal, there being only 5 cases in Calcutta, in none of which did conviction follow; and 36 in the suburbs, in which 14 persons were punished.

There was more heinous crime in the suburbs than in Calcutta during 1872. There were 5 murders, in one only of which the prosecution failed. There were 2 culpable homicides, 11 cases of grievous hurt, and 3 of kidnapping.

Considering, however, the many discordant elements, both shore and maritime, and the many pugnacious races that meet in Calcutta, and the heat and the grog-shops, and the other evil influences to which the maritime strangers especially are exposed, it is indeed singular, and evidences a very successful administration, that the Commissioner should have been able to say as he does, on apparently very good grounds, that Calcutta and its environs are more free from violent crime than any other city of the same size in the world. He shows, too, that crime against property is not on the whole very common.

The Hindus appear to maintain almost a monopoly of suicides; 29 of the 32 cases reported in the town, and 11 of the 12 in the suburbs, being among the people of that race.

Mr. Wauchope, before laying down his office on departure for furlough, submitted some very valuable general remarks on crime, the criminal class, and the organization and management of the police. Those which were of general interest have been circulated for the information of all District Magistrates and police officers, to whose attention they are much recommended.

CHAPTER VI.

CRIMINAL JUSTICE.

THE most important fact in connection with the administration of criminal justice during the year was the introduction of the new Code of Criminal Procedure, which came into force on the 1st of January 1873. Some of the provisions of this Act, especially those relating to summary trial and limiting the right of appeal in such cases, were viewed with much apprehension by a section of the Native Press. It is difficult for a Bengali to conceive any other idea of a criminal case than that it is a less expensive and more exciting kind of civil suit in which unlimited appeal should be allowed. Already, however, the alarm and agitation appear to have completely subsided, while the Code is working smoothly and with a remarkable absence of friction of any kind. The testimony of the Divisional Commissioners to this effect is almost unanimous; the only persons who still look with disfavor on the Act being said to be the native lawyers, and others of the Baboo class, whose opposition it is not perhaps very difficult to understand.

The three great divisions of the Criminal Procedure Code relate to (1) the constitution of the criminal courts; (2) the conduct of criminal proceedings; and (3) the prevention of crime by interference beforehand. It will be convenient to refer here to the principal changes effected by the Code under these headings with special reference to the action taken by this Government to give effect to its provisions. The Code, after providing for the appointment of Sessions Judges and Assistant Sessions Judges, proceeds to define the powers of the various classes of Magistrates. The Magistrates are divided into three classes for most judicial purposes, but for practical purposes into four classes, the new Code having constituted the Magistrate of the District the official superior of all the Magistrates in the district, of whatever grade. No one can take up cases without his authority or that of the Local Government. He can confer also various other powers on his subordinates which they cannot otherwise exercise without the special orders of Government. He transfers cases, hears appeals from second and third grade Magistrates, makes rules for Benches of Magistrates, and exercises himself, as a matter of course, powers of summary trial and all the powers of a Magistrate of the first class. In non-regulation provinces he may further, under certain

restrictions, try all offences not punishable with death and award imprisonment up to seven years and fine unlimited. Under him are—First-class Magistrates, equivalent to the “full-powered Magistrates” of the old Code, who may sentence up to two years’ imprisonment and Rs. 1,000 fine; “second-class Magistrates,” equivalent to the “first-class Subordinate Magistrates” of the former Act, having power to sentence up to six months’ imprisonment and Rs. 200 fine; and “third-class Magistrates,” equivalent to the former “second-class subordinate Magistrates,” who can give up to one month’s imprisonment and Rs. 50 fine. While the judicial powers of the three classes of Magistrates are thus left unaltered, amendments in the schedule of offences triable by each have considerably extended the range of cases with which Magistrates may deal. At the same time provision is made for the creation of Benches of Magistrates, having powers as such which may be superior to those of any individual Magistrate sitting on them. Officers in charge of sub-divisions also are vested in virtue of that office with special powers in respect of various matters of criminal administration.

Distribution of powers.

The Lieutenant-Governor has from the first been chary of conferring first-class powers save upon officers fully qualified, and at places where there is real need for a Magistrate of that rank. The practice which His Honor has been inclined to follow is that the bulk of the Magistrates shall be of the second class, with powers to commit to the Court of Session. Such officers can refer for the confirmation of the District Magistrate convictions in which heavier sentences are required than their powers allow, but which they do not wish to commit; while in disposing of the mass of the criminal work they are under the full and direct control of the Magistrate, the district head. There are generally, however, one or two or more first-class Magistrates in each large district, under the Magistrate of the district. Other orders of the Government have had for their object the prevention of the practice of bandying complainants about from court to court at a head-quarters station. The District Magistrates have been directed to distribute the criminal work on some recognized plan, appointing one or more courts as required for police cases, and assigning to each officer engaged in criminal work either a local jurisdiction or certain definite classes of cases.

Summary trials.

One of the most important novelties in the Code is the power of summary trial in certain classes of cases—such as petty theft, and house-trespass, rioting, mischief, assault, &c. This power the Magistrate of the district possesses, and it may be specially conferred on first-class Magistrates or on Benches of Magistrates. The record in these cases is of a brief and summary character, and from sentences of three months’ imprisonment or less, or fine up to Rs. 200, there is no appeal. The Lieutenant-Governor has been slow to confer these powers very freely upon Magistrates sitting, singly, except perhaps in the neighbourhood of Calcutta, where the system will work more under the check of public opinion. Only first-class Magistrates of approved efficiency and discretion have been so vested. But, on the other hand, free recourse has been had to the power of appointing Benches of Magistrates, and conferring summary power on such Benches.

Honorary Magistrates in considerable number have been appointed in most districts, and rules have been framed conferring on Benches consisting of a salaried Magistrate with not less than second-class powers sitting with two or more Honorary Magistrates, powers of the first class and the highest summary powers. A salaried Magistrate of any grade sitting with one Honorary Magistrate will have inferior summary powers; while two or more Honorary Magistrates sitting together are vested in towns with summary powers in municipal cases, and such like only.

A good deal of discussion has taken place as to the policy and constitution of these benches and the classes of persons to be appointed Honorary

Class Magistrates. Magistrates. Some District Officers had set up such a high ideal that they could find not a single individual in their jurisdiction whom they considered worthy to be appointed. Others thought that rent questions and other disturbing causes made anything like a popular element in the administration of justice inadvisable. The Lieutenant-Governor's views on these points are stated in the following extract from a circular lately issued :—

“Honorary Magistrates have been appointed and Benches arranged in many districts. In some Magistrates have objected that class litigation makes it dangerous to do so, and certainly there is so much of class questions in some parts of the country that the Lieutenant-Governor is becoming seriously alarmed, lest by appointing exclusively men of the upper classes these questions should be prejudiced. The arrangements are such in regard to Benches, reference of cases, &c., that he has not much fear of actual cases being seriously prejudiced; but the Lieutenant-Governor does somewhat fear the power and influence which the name and trappings of Magistrate may give in the eyes of an ignorant people, if the Magistrates are too much of one class. That there may be inconveniences in a class magistracy, the experience of the British Islands proves. Even when general class questions were not burning, the English magistracy, as an aristocratic institution, was not free from suspicion of prejudice in game questions and such like. In Ireland, where there were great class questions, it was generally found impossible to allow an aristocratic unpaid magistracy to act, and since class questions have become prominent in England, the country magistracy is found to be a very assailable institution. On all sides the tendency in the United Kingdom now is to doubt the advantage of an unpaid magistracy, and to substitute stipendiary Magistrates. Certainly, then, His Honor does not wish to found an honorary magistracy on an English model. If the Benches are to be useful, they must be rather a sort of superior punchaycts, among whom all classes are represented, and not one class only. At sudder stations, from among lawyers, merchants, and other residents, as well as zemindars, a variety of classes may be found; but at sub-divisions and outlying places the Lieutenant-Governor is convinced that the system of entrusting to men selected from among the natives to dispose of the affairs of the natives, whether as Magistrates or in other matters, will not work fairly and usefully, unless really representative ryots and such like men, as well as men

of higher status, can be got. If we had the same facilities for obtaining at a reasonable cost stipendiary Magistrates fitted to deal with all cases that we have in Europe, the Lieutenant-Governor would not seek to create Honorary Magistrates. But both on account of the deficiencies of our courts, and with a view to educate the people of the country to manage their own affairs, he is after a long experience convinced that it is right to try to obtain Honorary Magistrates and committee men. The Lieutenant-Governor wishes, then, to appeal to local officers to make a real and earnest effort to find such men.

"The Lieutenant-Governor has just had before him a case in which in a particular district the District Magistrate and the Judge concur in saying that the Honorary Magistrate system cannot be carried out, because class questions are so burning that zemindars cannot be entrusted with power, and no good representative ryots can be found, there being, it is stated, nothing but disreputable middlemen and very poor and ignorant ryots. His Honor will probably be obliged to yield to that representation. But then he finds that both officers state that the district in question is quite an exceptional district. The Judge mentions the last district in which he served as one in which good representative ryots *abound*. After much inquiry the Lieutenant-Governor is convinced that in most districts such men, and good men of the class, are to be found. Again, then, he must express the hope that the local officers will find them and send up their names for Honorary Magistrates, school committees, road committees, municipal committees, and all bodies designed in some sort to represent the natives. Until this is well done the whole system will be worse than a failure.

"The Lieutenant-Governor is convinced that officers will fairly and honestly try to find the right men, and to carry out these instructions. If in any district they really cannot do so, he is open to conviction; but he expects to have the assurance that the effort has been made, and confidently believes that wherever the materials exist a good officer making the effort will find them."

In accordance with these orders Benches have been formed at the head-quarters stations and at most of the sub-divisions of the Burdwan, Presidency, Rajshahye, Dacca, Patna, Chittagong, and Bhargulpore Divisions. In some few districts also rural Benches have been experimentally established; but as a general rule the Lieutenant-Governor has not for the present sought to press for the very general appointment of these until some experience has been gained in the working of the system. In Cooch Behar, Orissa, and Chota Nagpore Divisions, arrangements are rather less advanced, as difficulties are found to exist in the backward condition of those provinces. The ryot element has been introduced in a good many places, but the Lieutenant-Governor's orders are as yet too recent to have borne much fruit. About Calcutta, in the suburbs, and elsewhere, the Benches are working easily and well. Detailed reports from other places have not yet been received.

Under the provisions of the Code a discretion as to the summoning of unnecessary witnesses, and a power of exacting preliminary deposit of their expenses in cases privately prosecuted, enable the Magistrate to keep

Shortening of procedure.

cases within reasonable bounds. It is believed that these provisions of the law are generally appreciated by officers of all grades.

Instructions have been given to both Commissioners and Magistrates to watch carefully the working of the summary procedure, and all officers have been warned that as regards the record in such cases, it is for the present better to err on the side of precision than to carry brevity to the point of obscurity.

A very important change in the new Code is the jurisdiction given over European British subjects to the courts of the interior. This was made the subject of some discussion in the English Press. There was, however, on the whole a singular unanimity of feeling that the time had come for doing away with the practical immunity which a European wrong-doer in the interior had hitherto enjoyed. The change has been introduced with ease, and there is an entire absence of complaint as to its working hitherto.

The Code summarizes in a clear form the duties of landholders, village-watchmen, and the public generally, in respect of giving information of, and preventing crime. The Lieutenant-Governor has had these provisions carefully extracted and circulated in such way as to leave hardly any ground in future for the plea of ignorance as to what the law prescribes on this important subject.

Rules for the payment of witnesses' expenses by Government in certain cases have been drawn up, and much correspondence has passed with the High Court regarding the levy of fees upon processes in cases not cognizable by the police. The Lieutenant-Governor was anxious to avoid the imposition of too heavy fees upon such processes, though admitting that the burden of serving them gratis through the police had been very serious. The court after some demur consented to revise the somewhat heavy scale which they at first proposed, and the whole matter is now with the Government of India for sanction.

In the law upon the subject of juries, the Code makes several important alterations. If the Judge differs from the jury, he may refer the case for the orders of the High Court. The High Court may also, in the exercise of its powers of revision, set aside the verdict of a jury if the Judge has misdirected them. The Lieutenant-Governor understands that Judges have used their power of reference somewhat freely, and approve much of the change in the law. On the other hand, the High Court does not complain that the amount of extra work so thrown on it is at all serious. There can be no doubt that the law has here been much improved.

Another innovation which has been much canvassed is in the sections permitting, in certain carefully guarded cases, an appeal against an acquittal, and enabling the appellate court to whom an appeal may have been preferred to enhance sentences passed if it considers them insufficient. Government alone

Appeals from acquittal and enhancement on appeal.

has the power to sanction an appeal from an acquittal, and several applications have been made to the Lieutenant-Governor under this section since the Code came into operation. He has not, however, as yet acceded to any of them, thinking such a step ought only to be taken when the case is very clear. There have been, however, several instances in which the High Court have of their own motion enhanced punishment on appeal in cases in which such a course was obviously for the interests of justice.

Under the heading of the preventive jurisdiction of Magistrates, the chief changes effected by the

Preventive jurisdiction.

Code have been the enactment of clear rules as to the employment of military force for dispersing unlawful assemblies, and the permission to award rigorous instead of simple imprisonment for bad characters in the case of their failure to give security for good behaviour. Under the former law the jails were full of ruffians who were maintained in idleness by the State for the whole period of their detention.

On the whole, the Criminal Procedure Code of 1872 has been

Successful working of the Code.

found in practice to be singularly free from blots, loop-holes, or difficulties,

Almost the only flaw of any moment is an infelicity in the wording of one section which now prescribes that sentences of whipping shall be carried out at the *district* jail in presence of a Magistrate. Some difficulty has been felt in giving practical effect to this even at head-quarters stations, and if the word *district* is to be strictly construed, flogging at sub-divisions would become almost impossible. A sub-divisional lock-up may, however, perhaps be treated as a district jail for purposes of this section.

As the criminal returns before Government relate only to the year 1872, while the Code came into force with 1873, it is not possible to give details of its comparative working or effect on the criminal returns. That will be matter which the High Court figures and reports for 1873 should explain in detail. Meantime it can only be said that practically the Code is a success

At pages 95 and 96 of last year's report the Lieutenant-Governor

The superior appellate court.

commented upon the way in which the superior appellate court is some-

times worked in the matter of criminal special appeals; that is, further appeals after there has already been one regular appeal. There have not been wanting instances in the year under review tending to show that the power of getting cases before particular Benches, and procuring orders for bail and such like from such Benches, is made the subject of calculation, and tends to do at times much harm. There is a great evil in the growth of lawyer power in the High Court, in respect of criminal cases, devoted to the pressing of criminal special appeals, while there is a want of a corresponding power to look after the interests of public justice.

Although the Supreme and Sudder Courts have been amalgamated

Present arrangement for law officers.

into the present High Court, and the whole administration of justice and

superintendence of the courts is now centred in that court, the

arrangements for the conduct of legal business have never been adjusted to the altered arrangements of the judiciary, and the law officers for the original jurisdiction of the High Court are still as entirely separate from those in its appellate jurisdiction, as when the Supreme Court was an entirely distinct court. Moreover, although the Government of Bengal has so long been separated from the Government of India, there has been no separation of law officers, and this Government has in the original jurisdiction no assistance from any officers of its own, but depends entirely on those of the Government of India. It is in no degree the business of those officers to act out of the original jurisdiction. It is believed that the Advocate-General is even considered at liberty to appear against Government on the appellate side of the High Court or in the courts of the interior, and has not unfrequently so appeared.

The Lieutenant-Governor has had occasion to think that there is much reason to find fault with the conduct of criminal cases in Calcutta up to the time of their coming into the hands of Counsel. While most of the business done is necessarily for this Government, it has not only no law officers of its own, but no control over those appointed by the Government of India.

Such fault cannot be found with the conduct of criminal cases by Counsel in the original jurisdiction of the High Court. No doubt they are fairly conducted by able and honorable men, but at the same time the Standing Counsel is scarcely in any communication with this Government, and in no degree subordinate to it. In the course of many years it has sometimes appeared to the Lieutenant-Governor that there was a failure of justice in some degree owing to Counsel's want of acquaintance with the interior. Cases are generally left to be dealt with according to his almost unaided judgment. His Honor strongly thinks that the Counsel who prosecutes in criminal cases should be placed in more intimate relation with this Government.

As regards the courts of the interior and the High Court of appeal, at present the Legal Remembrancer, who has (save for a few months in 1861) always hitherto been a Civil Servant, is general Superintendent of the Government litigation throughout the country, and he advises the Board of Revenue, the Government, and heads of departments when they seek his advice. He corresponds with the Collectors and Government Pleaders, settles pleadings, instructs and directs in all proceedings. Besides Government work, he has to look after all the litigation of the Wards' estates under the Court of Wards all over the country,—a very much heavier task. The Lieutenant-Governor lately inquired why there should be so much litigation of this kind, so much more than in Government estates, and was told that it was almost impossible to avoid it with any regard to the feelings of the families whom we represent. His Honor gathers that lawsuits are a sort of family appendages in which the family honor is concerned, and that to give up the suits would be almost worse than the conduct of the trustee of a great English estate, who, while his Ward is at Eton or Oxford, should dismiss the gamekeepers, destroy the game as vermin, trap the foxes, and hand over the estate bereft of

all such amenities. The Lieutenant-Governor certainly thinks, however, that these legal luxuries should not be supplied to native families at the expense of Government, and that they should pay for them. Till the time of the last incumbent, Mr. Bell, the Legal Remembrancer, seldom, if ever, thought of going into court and pleading. This was not his function; but Mr. Bell has taken to do so in important cases, and sometimes with success. The position of the Legal Remembrancer is, however, a peculiar one. He must be qualified for the post by certain legal attainments. He must, in fact, be, or at any rate ought to be, a lawyer more or less, and yet his service does not qualify him for a seat in High Court. Hence the number of eligible candidates for the post is very limited.

There has been much difference of opinion as to the conduct of Government civil business in the courts of the interior. The prevailing opinion is that it is not well done. The Lieutenant-Governor was very strongly advised in that sense by a late Advocate-General, in whom both the Government of India and this Government had exceptional confidence; and to that view he inclines, though he is not prepared to give a strong and complete opinion of his own. When we have a case of any consequence in the interior, we are obliged to send up a private Barrister at an enormous cost.

As regards the criminal business, the want of a competent prosecutor for cases tried in, and appealed from, the interior, has become a most crying evil. His Honor has no hesitation in saying that nothing in the whole range of our administration more requires looking to in the interests of the community than this. He has expressed himself in favour of the plan of employing Joint and Assistant Magistrates in the courts of the interior to prosecute important cases, as suggested by Mr. Stephen, but much more than this is required. It is only of late

Growing strength of the defence.

years that the practice of very generally employing European Barristers and other eminent Counsel for the defendants in criminal cases has grown up. Now it is becoming extremely common—in the High Court almost universal—and very great injury results when the prosecution also is not properly looked after. In the Magistrate's courts there is not much difficulty. Before the Sessions Judges there very often is. The Government Pleader is often unable to cope fairly with the Advocate imported from Calcutta, and he has probably no one to instruct and guide him who has a competent technical knowledge. But it is when the case comes to the High Court that the man who can employ strong Counsel has the greatest advantage, especially if he can also manoeuvre to get his case before a particular Bench, as it is said that he often can. He can not only come up in regular appeal, but there is the criminal special appeal already alluded to, of which rich men very much avail themselves. Moreover, a practice has of late years grown up before one or two Benches of allowing appeals from interlocutory orders in criminal cases. The Lieutenant-Governor has lately known an instance in which, on a mere *ex parte* application and *ex parte* affidavits, without notice or production of the record, men under trial on very serious charges have been released on bail by *telegraph*. His Honor hopes it will not be supposed that he means to attack the conduct of the High Court generally. That is very far from His Honor's intention. But

he does say that things may occasionally happen which ought not to happen when a strong Counsel is not adequately confronted by a strong public prosecutor. The Legal Remembrancer ordinarily has not gone, cannot go, and it is not his duty to go, into court in such cases. Native Pleaders of the High Court, however learned and acute, have never been accustomed to deal with evidence, cannot deal with it efficiently, and know very little of criminal law and practice. The Government Pleaders there get no fees for criminal cases.

The Lieutenant-Governor has represented that for cases of every description the Government of Bengal should have a Chief Legal Adviser.

whose functions should not be restricted to Calcutta, but who should be the chief law officer of the Government of Bengal for all purposes. The Governments and Administrations of the interior—the Punjab, North-Western Provinces, even Oudh, His Honor believes,—have their law officers; this Government alone has none. The Lieutenant-Governor has recommended that the legal establishments should be wholly remodelled and strengthened; instead of the various and discordant offices now employed, we should have a modernized establishment, including especially a public prosecutor.

While the Criminal Procedure Code was under discussion, the Lieutenant-Governor urged upon the Government of India the desirability of assimilating the procedure in the presidency towns to that of the courts of the interior as far as their peculiar circumstances and history would permit. Everywhere else, and in the presidency towns themselves, on all other subjects, modern codes have been brought into force. The introduction of the Code of Civil Procedure seemed to be a much greater change than that proposed, but the thing was done, and there has not been the least difficulty or complaint. It has worked as smoothly as possible. In criminal matters the practical inconvenience of the present state of things is really great. There is no written law; the criminal procedure is still a mystery of the initiated,—that is to say, the lawyers; and, although in the superior courts that might be no great inconvenience, it is very embarrassing that the procedure under which inferior courts, such as those of the Police Magistrates, act, should be a sealed book to the administration, which can know nothing of it without consulting lawyers. Also there is at present a singular want of any machinery for supervising these inferior courts, which are in no way supervised by the High Court, or by any one else. The procedure itself is not only English, but it is an antiquated English procedure without modern improvements.

The Committee of the Legislative Council, with the concurrence of the High Court, accepted the general principle suggested by the Lieutenant-Governor as to the assimilation of procedure, but Mr. Fitzjames Stephen was unfortunately unable to prepare a Bill before his departure from India. A draft Bill has, however, been recently circulated for opinion, and the question is now again under consideration. The Lieutenant-Governor is convinced of the absolute necessity of making the new law

so complete as to enable us explicitly, and in so many words, to exclude the doctrines and practice of English law as in force in the presidency towns. It is above all things owing to the mass of indeterminate law and practice thus introduced that we are unable to form any clear idea of what the procedure in Calcutta really is. Whatever the procedure may be, it should be set out in a complete shape in the Statute Book, and no reference to other laws should be necessary or allowable.

The Coroner and the Coroner's office, and the mode of inquiry into unnatural and sudden deaths, the procedure not only of Police Magistrates, but of Justices of the Peace, supervision of the Magistrates' proceedings, and many other points not yet properly considered, will have to be dealt with in such a Bill as is proposed.

CRIMINAL STATISTICS.

The returns of the past year have only still further confirmed the truth of what the Lieutenant-Governor stated at page 94 of last year's report, as to the urgent need of a more active superintendence of the working of the subordinate courts. From the quarterly and annual statements submitted to Government, it appears clear that extreme differences of practice prevail in different districts, not only as to the classification and treatment of cases, but in such matters as the keeping of registers of attendance of witnesses, reception of complaints, and so on. The returns of the Magistrates and those of the Police Department as submitted to Government have now been assimilated; but it is not always possible to reconcile these with those submitted by Sessions Judges to the High Court. It is not at present the province of Government to rectify anomalies in the judicial returns when they come to light, but as far as possible attention has been drawn to them.

In the absence of the High Court report, we have only the criminal statements drawn up by the Court to furnish matter for comment.

High Court—Original side.

At the Sessions on the original side of the High Court 204 persons were dealt with, 8 were discharged without trial, 58 acquitted, and 138 convicted. Other details will be found in the Appendix.

In the Sessions Courts of the interior 4,559 persons were dealt with, of whom 31 were discharged, 1,455 acquitted, and 2,535 convicted.

Courts of the interior.
Convictions and acquittals.

The Magistrates of all grades had before them 166,972 persons, as against 155,504 in 1871. Of these 37,397 were discharged without formal trial, 34,062 were finally acquitted, 86,802 were convicted, and 4,084 were committed; 533 died, escaped, or were transferred.

Seventy-eight persons were executed, 275 transported for life, 49 transported for a term of years, 25,871 were sentenced to penal servitude or rigorous imprisonment, 3,342 were whipped, 57,163 fined.

Punishments.

In 447 cases tried by jury in the interior, the Judge expressed his dissent from the finding of the jury in 48. In 1,289 cases tried with assessors, the Judge dissented in 163.

Jury trials.

District Magistrates heard 3,727 appeals from their subordinates.

Appeals.

Of these they rejected 508, confirmed the sentence in 1,996, modified it in 343, and reversed it in 612. The Sessions Courts had 9,901 appeals, of which they rejected 1,406, confirmed sentence in 5,544, modified it in 766, reversed it in 1,498. The High Court had 1,891 appeals, upheld the sentences in 1,423, modified them in 97, and reversed them in 187. There were 469 applications for revision, in 247 of which the lower courts' judgment was upheld, in 26 modified, and in 190 reversed.

On the whole it may be said that, looking to the population of

Results under principal headings of crime in High Court Statements.

Bengal, there is not a large proportion of violent or heinous crime. Crime so far as it is cognizable by the Police is more conveniently reviewed under the head of Police. But the following salient points in the judicial statements may be briefly touched on here. Rioting and unlawful assembly and affrays contributed 3,618 out of the total number of cases reported; 10,934 persons were tried for this offence, of whom 7,003 were convicted. False evidence, though common enough in the courts, is seldom prosecuted, and is difficult to bring home. In 650 cases 904 persons were tried and 279 were convicted. There were 830 murders and culpable homicides, and attempts at those crimes, for which 1,715 persons were apprehended; of these 552 were convicted. Thuggee is absent. Petty assaults swell up to 44,174 cases, acquittals being far ahead of convictions (18,761 to 12,949). In some districts, especially in Eastern Bengal, assault is by far the most common form of charge. The cases are said to be often false, and brought into court only as a means of harassing a neighbour; many such cases after being brought are compromised or withdrawn. Under kidnapping 343 cases are shown, but of 471 persons tried, only 110 were convicted. Thefts gave a total of 27,875 cases, but only 21,720 persons were put on trial, and 10,307 convicted for this offence; very many cases are undetected. Dacoity shows 426 cases, in which 1,885 persons were tried and 509 convicted; but many of these are only technically called dacoity. Dacoities of the old style comparatively seldom occur. Criminal trespass in the form of house-breaking gives 11,293 cases, in which only 2,015 persons were convicted out of 3,695 put on trial. This offence is always ineffectually dealt with, and is peculiar to Behar as assault to Eastern Bengal. Offences against marriage were 3,613;—2,025 persons were put on trial, but only 283 convicted. These cases chiefly occur in the Eastern and Mahomedan districts, where the *nika* system of marriage tends to multiply offences of the class, while the absence of any general registry of marriages and divorces prevents proof being got of the facts necessary to support cases in court. A new law for regulating Mahommedan marriages is under consideration. For defamation 570 persons were put on trial, and of these only 132 were convicted. 28,798 of the offences of this year were under local and special Acts. Taking Penal Code cases only there were 148,904 cases in all, in which 131,565 persons were put on trial, of whom 64,506 were acquitted or discharged, and 62,406 convicted.

The statement below gives the misdemeanours not cognizable by the Police instituted in the Magistrates' Courts of each district, the cases of a similar character taken up by Magistrates of their own motion, &c., with the percentage of convictions to persons against whom process issued and number of persons convicted to population :—

DIVISION.	DISTRICT.	Population.	Number of cases instituted.	Number taken up by Magistrates of their own motion.	Number of persons against whom process issued.	Number actually appeared.	Number of persons convicted.	Percentage of convictions to persons against whom process issued.	Percentage of convictions to persons who actually appeared.	Number of persons convicted to population.
CALCUTTA	Town ...	447,610	19,563	...	21,405	20,808	17,753	82.9	85.3	1 to 25
	Suburbs ...	258,910	4,634	5	5,281	4,820	2,587	48.9	53.6	1 to 100
	Burdwan ...	2,034,745	1,942	...	2,456	2,547	1,233	49.7	49.0	1 to 1,663
	Bancoorah ...	526,772	734	10	699	647	318	45.4	49.1	1 to 1,356
BURDWAN	Beerbhoom ...	695,921	2,281	...	2,852	1,245	611	21.4	49.0	1 to 1,138
	Midnapore ...	2,540,003	3,819	195	4,708	3,341	1,463	30.6	43.7	1 to 1,738
	Hooghly ...	892,691	2,594	10	4,051	3,187	1,510	32.4	48.1	1 to 591
	Howrah ...	595,805	4,048	139	4,582	4,166	3,021	65.9	72.5	1 to 107
PRESIDENCY	24 Pergunnahs ...	1,951,137	4,478	227	6,278	5,940	3,930	62.5	67.2	1 to 496
	Nudda ...	1,812,795	3,175	164	3,749	2,192	1,143	30.1	52.1	1 to 1,586
	Jessore ...	2,078,021	2,890	184	3,193	2,985	1,801	41.1	44.3	1 to 1,594
	Moorshedabad ...	1,553,621	2,839	150	3,437	2,144	950	24.7	44.3	1 to 1,424
RAJSHAHYE	Dinapore ...	1,501,924	850	...	1,534	973	463	39.5	46.5	1 to 3,315
	Maldah ...	576,426	632	...	727	670	349	53.5	58.0	1 to 1,738
	Rajshahye ...	1,310,720	1,176	111	1,595	1,245	662	41.5	53.1	1 to 1,980
	Rungpore ...	2,149,972	1,773	4	1,308	1,297	778	59.0	59.6	1 to 2,781
COCH BEHAR.	Rograh ...	699,467	1,003	43	994	1,003	260	26.1	24.4	1 to 2,651
	Pubna ...	1,211,594	2,939	114	2,860	1,659	913	31.9	55.0	1 to 1,327
	Darjeeling ...	47,712	224	20	261	294	95	36.4	32.3	1 to 997
	Julpigore ...	418,663	397	23	422	437	192	45.5	43.9	1 to 2,180
Dacca	Dacca ...	1,855,993	5,672	25	5,174	3,766	1,734	33.5	40.1	1 to 1,068
	Furriedpore ...	1,012,589	4,709	20	4,440	2,633	1,303	31.3	54.9	1 to 728
	Backergunge ...	2,377,431	6,519	104	5,641	3,664	1,709	30.2	55.7	1 to 1,508
	Mymensing ...	2,349,917	4,172	164	2,281	2,253	958	41.9	41.9	1 to 2,781
CHITTAGONG	Sylhet ...	1,719,539	5,645	...	7,081	3,692	1,430	20.2	46.2	1 to 1,302
	Cachar ...	205,027	1,905	4	1,980	1,135	617	30.3	64.8	1 to 532
	Chittagong ...	1,127,402	3,184	8	1,721	1,227	633	37.9	53.2	1 to 1,728
	Noakhally ...	713,034	2,769	12	2,975	1,424	719	24.1	50.4	1 to 992
PATNA	Tipperah ...	1,533,931	4,089	5	4,351	1,937	1,072	24.6	55.3	1 to 1,431
	Cya ...	1,559,038	1,290	32	2,018	1,461	941	46.6	50.5	1 to 1,367
	Shahabad ...	1,949,750	953	45	1,098	1,015	606	60.1	59.8	1 to 3,217
	Tirhoot ...	1,725,974	1,330	11	2,581	2,269	943	36.5	41.2	1 to 1,822
BHAUGULPORE.	Sarun ...	4,384,708	1,523	53	2,724	2,581	1,228	30.4	32.7	1 to 5,285
	Chumparun ...	2,065,960	1,457	27	2,442	2,029	1,283	52.5	63.2	1 to 1,909
	Monghyr ...	1,440,815	402	31	809	824	418	51.6	50.7	1 to 3,444
	Bhaugulpore ...	1,812,086	1,552	5	2,285	1,025	510	35.4	49.8	1 to 2,328
CUTTACK	Burneah ...	1,826,290	2,364	...	1,471	1,732	686	46.6	39.6	1 to 2,363
	Sonthal Pergunnahs ...	1,714,795	2,916	140	3,540	2,281	746	21.1	32.8	1 to 2,229
	Cuttack ...	1,239,287	2,679	124	5,193	3,596	1,622	29.3	39.0	1 to 837
	Pooree ...	1,494,784	2,136	75	2,219	1,841	518	23.3	31.5	1 to 2,885
CHOTA NAGPORE.	Balsore ...	798,674	1,144	...	1,595	1,002	475	29.7	47.4	1 to 1,230
	Hazareebaugh ...	770,232	838	2	1,153	961	374	32.7	22.5	1 to 2,911
	Johardanga ...	771,875	430	...	826	758	304	36.8	40.1	1 to 2,539
	Singbhoom ...	1,237,133	1,069	12	1,547	1,061	552	35.6	59.6	1 to 2,241
ASSAM	Gaunbhoom ...	416,023	189	10	437	473	187	42.8	39.5	1 to 2,119
	Kamrup ...	585,970	859	40	1,413	1,476	545	59.5	57.1	1 to 1,150
	Durrung ...	444,761	502	3	538	503	291	54.0	61.6	1 to 1,553
	Nowgong ...	581,081	1,167	...	759	762	308	39.9	39.9	1 to 1,322
LUCKNOW	Seebasagor ...	236,009	603	6	446	451	273	61.2	60.3	1 to 864
	Lucknow ...	256,390	1,253	7	934	638	402	40.3	65.0	1 to 597
	...	290,589	973	58	898	774	372	42.5	45.0	1 to 796
	...	121,267	644	10	577	577	171	29.6	29.6	1 to 709
Total ...		64,239,389	12,9014	2,472	1,46,420	113,129	63,581	45.4	56.2	1 to 1,610

There has been some increase in petty cases in the year under report, and the reasons given for the increase in the institution of such cases are that many now come before the courts which were formerly settled in the villages or by landholders and others. It is further attributed partly to reduction of charges under the Stamp Act, and partly to the action of the lower classes of native attorneys, who, having lost a great portion of their practice since the transfer of rent-suits to the civil courts, devote their energies to the getting up of quarrels. Exceptional general prosperity and growing independence of the lower classes is assigned in some districts as a cause of increase. Injuries, especially attempts at extortion or illegal restraint, are resented and brought into court more readily than heretofore. No doubt also many really civil injuries are brought into the criminal court in an exaggerated shape, and tend to swell the list and disturb also the proportion of convictions to acquittals.

The following statement shows how the criminal work is distributed among the different districts, and represents the whole amount of crime in Bengal that actually came before the courts, including municipal and all other cases:—

District.	Population	Number of cases decided on trial.	Acquitted and discharged.	Convicted and committed.
Calcutta	447,601	19,040	4,936	22,179
Burdwan	2,034,745	4,162	2,973	3,764
Bancoorah	526,772	481	310	663
Beerbhoom	695,921	1,404	1,056	1,159
Midnapore	2,540,963	4,808	3,184	3,031
Hoochly	757,499	3,363	2,218	2,339
Howrah	731,057	5,173	1,817	4,798
24-Pergunnahs	2,210,047	9,117	4,403	11,765
Nuddea	1,812,795	3,063	2,410	2,649
Jessore	2,075,021	3,894	2,873	3,395
Moorsheadabad	1,353,625	2,811	2,727	2,305
Dinagopore	1,501,924	2,506	947	2,519
Maldah	678,426	788	510	931
Rajahahye	1,310,729	2,046	1,327	1,753
Rungpore	2,149,972	1,400	1,043	1,451
Bograh	689,467	1,347	1,089	620
Pubna	1,211,594	1,721	1,203	1,526
Darjeeling	91,712	432	345	323
Julpigoree	418,065	660	434	514
Goalpara	414,761	560	520	575
Dacca	1,852,993	5,291	3,089	3,233
Furzedpore	1,012,589	2,710	1,741	2,183
Backergunge	2,377,433	3,528	2,726	3,246
Mymensing	2,349,917	2,534	1,915	1,896
Sylhet	1,718,539	3,074	3,041	2,845
Cachar	205,027	1,226	718	985
Chittagong	1,127,402	1,302	977	1,508
Noacolly	713,934	1,505	1,007	1,407
Tipperah	1,533,931	2,185	1,449	2,255
Chittagong Hill Tracts	69,307	117	848	156
Patna	1,559,638	2,879	1,545	3,229
Gya	1,949,750	1,702	1,232	1,581
Shahabad	1,723,974	2,922	2,442	2,319
Tirhoot	4,384,706	2,767	2,900	2,817
Carried over ... ..	...	.....	.....	.....

District.	Population.	Number of cases decided on trial.	Acquitted and discharged.	Convicted and committed.
Brought forward	.....	.....	.....	.....
Sarun	2,063,660	2,451	1,588	2,354
Chumparun	1,440,815	1,012	701	1,001
Bhaugulpore	1,626,290	1,196	785	1,180
Monghyr	1,812,986	1,873	1,772	2,081
Purneah	1,714,795	2,202	2,957	1,492
Sonthal Pergunnahs	1,259,287	3,690	3,347	3,086
Cuttack	1,494,784	1,492	1,605	1,237
Pooree	709,674	1,143	893	1,080
Balasore	770,232	1,112	1,091	911
Hazareebaugh	771,875	1,356	945	1,221
Lohardugga	1,237,123	1,351	1,332	1,295
Singbhoom	415,023	452	485	469
Maunbhoom	995,570	1,554	1,311	1,680
Kamroop	561,681	1,336	867	1,088
Durrung	236,009	631	265	697
Nowgong	250,390	630	369	692
Seobaugor	296,589	959	621	841
Luckimpore	121,267	570	708	371
Naga Hills	68,918	20	12	30
Khasi and Jynteah Hills	141,838	104	41	137
Total	64,519,743	128,336	83,210	121,139

From the Jail Report the following judicial statistics have been for the most part extracted :—

The number of convictions in each district in 1872, and the proportion of convictions of all sorts to the population of the district as given in the late census return, are shown below :—

Name of District.	No. of sentences of imprisonment.	Proportion to population of persons imprisoned being 1 in—	Proportion of convictions of all kinds to population being 1 in—
	1872.		
Calcutta	1,644	272	20
24-Pergunnahs	2,606	848	187
Jessore	1,737	1,194	611
Patna	1,600	974	483
Tirhoot	1,534	2,858	1,555
Backergunge	1,447	1,643	732
Sylhet	1,335	1,281	604
Sonthal Pergunnahs	1,301	968	408
Midnapore	1,120	2,268	699
Shahabad	1,108	1,556	776
Hooghly with Howrah	1,087	1,369	147
Burdwan	1,018	1,998	542
Nuddea	988	1,835	711
Dacca	980	1,890	573
Sarun	882	2,339	876
Monghyr	876	2,069	879
Gya	794	2,455	1,272
Moorshedabad	769	1,760	587
Furreedpore	769	1,316	474

Name of District.	No. of sentences of imprison- ment.	Proportion to population of persons imprison- ed being 1 in—	Proportion of convictions of all kinds to population being 1 in—
	1872.		
Mymensing	739	3,180	125
Rajshahye	726	1,805	748
Tipperah ...	716	2,142	681
Maunbhoom	708	1,406	586
Bhaugulpore	672	2,717	1,547
Cachar ...	617	332	208
Lohardugga	546	2,265	955
Rungpore	541	3,974	1,481
Chumparun	524	2,749	1,439
Cuttack ...	504	2,966	1,208
Dinagepore	485	3,096	596
Purneah ...	476	3,602	1,149
Hazareebaugh	432	1,786	632
Pooree ...	400	1,924	706
Chittagong .	383	2,943	747
Pubna ...	377	3,213	793
Balasore ...	366	2,104	845
Bancoorah	361	1,459	794
Noacolly ...	355	2,011	507
Maldah ...	340	1,989	726
Sebsaugor	325	912	352
Beerbhoom	313	2,223	604
Kamroop...	304	1,847	516
Durrung ...	274	861	338
Bogra ...	265	2,601	1,112
Nowgong	255	1,005	370
Julpigoree	218	1,920	814
Debrogurh	179	677	326
Singbhoom	174	2,385	831
Goalpara	169	2,631	773
	151	627	288
	62	2,288	1,035

The columns of the above statement afford some curious and novel matter, as it is the first time that an opportunity has occurred of comparing criminal statistics in Bengal with a correct census. The numbers attached to each district in the following statement represent the number of inhabitants to each individual who committed a crime punished with imprisonment or whipping during 1872 ranged in order of criminality :—

Calcutta	272	Sebsaugor ..	...	...	912
Cachar ...	332	Sonthal Pergunnahs	...	...	968
Darjeeling ...	627	Patna ...	...	...	974
Debrogurh ..	677	Nowgong ...	...	...	1,005
24-Pergunnahs	848	Jessore ...	...	...	1,194
Durrung .	861	Sylhet ...	...	...	1,281

Furreedpore	1,316	Beerbhoom	2,223
Hooghly with Howrah ...	1,369	Lohardugga	2,265
Maunbhoom	1,406	Midnapore	2,268
Bancoorah	1,459	Khasi Hills	2,288
Shahabad	1,556	Sarun	2,339
Backergunge	1,643	Singbhoom	2,385
Moorshedabad	1,760	Gya	2,455
Hazareebaugh	1,786	Bogra	2,601
Rajshahye	1,805	Goalpara	2,631
Nuddea	1,835	Bhaugulpore	2,717
Kamroop	1,847	Chumparun	2,749
Dacca	1,890	Tirhoot... ..	2,858
Julpigoree	1,920	Chittagong... ..	2,943
Pooree	1,924	Cuttack... ..	2,966
Maldah	1,989	Dinagapore	3,096
Burdwan	1,998	Mymensing	3,180
Noacolly	2,011	Pubna	3,213
Monghyr	2,069	Purneah	3,602
Balasore	2,104	Rungpore	3,974
Tipperah	2,142		

Two things are conspicuous in this statement, namely, the marked way in which the Labor Acts add to the nominal crime of the country, or the connection of criminality with tea (Darjeeling has six criminals and Cachar twelve to every one in Purneah or Rungpore), and the comparative freedom from criminality of a heinous type of the north-eastern plains—Rungpore, Dinagapore, and Mymensing. In connection with the effect of the labor laws on crime may be noted the large number of convictions (359) of Europeans in Calcutta, chiefly sailors, for breach of contract and shipping laws. Whether penal laws for breach of contract be right or wrong, nothing so much fills the jails where they do exist. Some attempt has been made to explain the comparative freedom from crime of Rungpore, &c., by a theory that the people have not energy enough for it, their standard of health being low. The Lieutenant-Governor does not attach any weight to this idea. The contrast between the north and south of the Ganges in Behar is curious:—

Patna, Gya, Shahabad, ... 3,502 criminals in 5,283,362 of population : or 1 to 1,494.
Tirhoot, Sarun, Chumparun,... 2,940 criminals in 7,689,381 of population : or 1 to 2,633.

The divisions in order of criminality, if we look only to sentences of imprisonment, are as follow:—

Presidency	1 in	938
Assam ... ..	..	1,288
Cooch Behar ... ..	..	1,423
Dacca ... ..	..	1,619
Orissa ... ..	..	1,681
Chota Nagpore ... ..	..	1,838
Burdwan ... ..	..	1,868
Bhaugulpore ... ..	..	1,989
Patna ... ..	..	2,029
Chittagong ... ..	..	2,321
Rajshahye ... ..	..	2,538

If we examine the position of the various divisions with reference to convictions and punishments of all kinds, the order of criminality is as follows :—

Calcutta	..	1 in	20	of the population.
Presidency Division	..	"	344	" "
Assam	..	"	436	" "
Burdwan	..	"	448	" "
Chittagong	..	"	646	" "
Dacca	..	"	665	" "
Cooch Behar	..	"	676	" "
Chota Nagpore	..	"	728	" "
Rajshahye	..	"	800	" "
Bhaugulpore	..	"	845	" "
Orissa	..	"	937	" "
Patna	..	"	997	" "

The apparently extraordinary fact that in Calcutta 1 in 20 of the population is annually convicted, is accounted for by the prosecutions under Conservancy and Hackney Carriage and Police Acts, in which numerous re-convictions and inflictions of petty fines take place. Moreover the actual *daily* population of Calcutta is much greater than its census population.

The average length of detention of under-trial prisoners in all jails was 17·2 days. In some districts, however, especially in those having only occasional sessions, the detention amounted to nearly double this.

There is very little juvenile crime in Bengal; the total number of convicts admitted to jail below the age of 12 being only 32, and between the ages of 12 and 16, 295.

Of 47,177 prisoners who were in jail during 1872, the following are the numbers under each religious head, and their proportion to the total population as shown in the census :—

	No. of criminals.	No. of population.	No. of criminals in 100,000 of population.
Europeans	.. 494	22,608	2,185
Eurasians	.. 136	20,279	670
Native Christians	.. 74	49,423	149
Total Christians..	704	92,310	783
Mussulmans	.. 16,695	20,664,775	81
Hindus	.. 27,949	42,674,361	65
All others	.. 1,829	2,438,400	75

These figures are at first sight rather startling, as they might appear to show that criminality is much more prevalent among Europeans than any other class, and that in proportion as a class partakes of the European nature it also partakes of criminality, Eurasians being about ten times as criminal, and Native Christians about twice as criminal, as non-Christian natives. There are several circumstances, however,

which should make us cautious in adopting such conclusions. In the first place, between 40 and 50 of the Europeans on the list are criminals of other Presidencies, now confined at Hazareebaugh Penitentiary; in the next place a large proportion out of the 359 criminals at the Presidency, and perhaps all the 39 at Chittagong, have been convicted in cases connected with shipping, in which a short imprisonment is ordered by law for offences which can hardly be called crimes, and sometimes, as may be seen from instances in Mr. Plimsoll's book, do not even amount to moral wrong-doing. Both soldiers and sailors indeed are liable to be punished for what may be called *technical* offences, to the commission of which the rest of the community is not exposed. Then again—and this perhaps is even more to the point—both Europeans and Eurasians in this country are marked men; they live in public. A crime committed by one of them is pretty sure to be known, and the criminal can with difficulty evade justice; whereas among the millions of natives many unrecorded crimes occur, and even when the crime is known it is frequently not followed by a conviction.

In Lohardugga, where there are 12,687 Native Christians, 23 passed through the jail, or at the rate of 181 per hundred thousand; the rate on the rest of the inhabitants was 52 per hundred thousand, or less than one-third. But the fact that the largest community of Native Christians is near the sudder station affected this result, and there is no reason to believe them more criminal than other people.

Looking at crime as affecting the two great divisions of the population, it may be said that Hindoos and Mahomedans contributed on the whole in pretty equal ratios. So far as any differences exist, it appears that Mussulman crime exceeds its due proportion in the Burdwan division; in the Moorsheadabad, Dinagapore, Rungpore, Pubna, and Darjeeling districts; in the Dacca division, in Noakhally and Tipperah; in Monghyr and Bhaugulpore; and largely in the Sonthal Pergunahs, Orissa, three out of the four Chota Nagpore districts, and the Assam districts except Gowalpara. The Mussulmans of Orissa are a turbulent race, mostly of Pathan origin.

Mussulman crime is below its due proportion in Calcutta, Jessore, and Chittagong districts, and about par in the districts of the Patna division.

Hindu crime largely exceeds the proportion of the population only in Nuddea, a district noted for the strength and turbulence of its *gowalas*, who formerly supplied the zemindars with *lattials*, and are still the principal class employed in dacoities.

The following table shows the proportion of the principal castes in jail to the free population of those castes according to the census.

Of the Kaora 1 in 463 was in jail during 1872.

„ „ Dom one in ... 493	Of the Barui 1,296
„ „ Methar 680	„ „ Bagdi 1,364
„ „ Rajwar 774	„ „ Kandra 1,397
„ „ Bhar 808	„ „ Kayasth 1,404
„ „ Dosadh 1,037	„ „ Rajput and Ohhettri 1,425
„ „ Manjhi 1,194	„ „ Hari 1,465
„ „ Ahom 1,277	„ „ Kahar 1,504

Of the Aguri	1,585	Of the Teli	2,814
" " Brahman	1,808	" " Paliya	2,877
" " Gond	1,833	" " Kurmi	2,884
" " Bhumij	1,869	" " Baishnub	2,945
" " Baniah	2,073	" " Chandal	3,007
" " Gwala	2,085	" " Kolita	3,254
" " Gandhabaniok ...	2,301	" " Dhanuk	3,302
" " Sadgop	2,301	" " Chasa and Kaiburta	3,310
" " Santhal	2,302	" " Mali	3,692
" " Pasi	2,351	" " Babhan	3,751
" " Pan	2,406	" " Jogi	3,773
" " Kamar and Lohar ...	2,406	" " Rajbungsi	4,056
" " Sonar one in ...	2,592	" " Pod	4,246
" " Tanti	2,662	" " Dhobi	4,312
" " Khandait and Ghat-		" " Sunri	5,080
wal	2,681	" " Napit	5,428
" " Bauri	2,695	" " Mallah	5,594
" " Cole	2,724	" " Sutradhar	6,984
" " Chamar and Muchi	2,738	" " Kumhar	8,296

As might be expected, the artisan classes are, as a rule, very low in the scale. The small amount of crime among the fisher classes is curious, as is also the fact that the Kaora, a swine-keeping race, akin to the Haris, takes so high a place. The Doms are not in Bengal a specially criminal race, but the Magheya Doms of Behar, especially Chumparun, are almost universally thieves. The Rajwars work as coolies for the ryots and turn out dacoits and robbers when agricultural pursuits are not being carried on. The Rajwars possess a caste peculiarity; although they will do all in their power to escape apprehension by the police, yet when once caught they will not try to escape, but cheerfully undergo their sentence. If they escape they are out-casted, which is not the case if they undergo their sentence. The Bhars, once a ruling race over so much of Gangetic India, are now known principally as robbers; and of the Dosadhs, who stand next on the list, "the bulk are either thieves or connive at thieving. Cattle stealing, burglary, and dacoity, are their peculiar weaknesses." It is strange to find so much criminality among the Ahoms, as most of the Assam officers state that serious crime in Assam is generally the work of foreigners.

Of those admitted into jail in 1872, 14,696 were convicted of offences against property; 5,591 of offences against the person; 2,947 of offences against public tranquillity; 208 of offences against marriage; 3,444 of other offences under the Penal Code; and 2,239 of offences under other laws.

As regards the locality of crimes for which imprisonment is awarded, Sylhet has twice as many cases of offences against the public tranquillity as any other jail; Jessore, Dacca, Furreedpore, Backergunge, Tipperah, Tirhoot, and Baraset, come next. This is specially a crime of the Eastern Districts, and of the Ferazees. Offences relating to public servants are pretty equally distributed, the

Character of offences punished with imprisonment.

Locality of crimes punished with imprisonment.

The number of petty punishments is, it will be observed, considerably greater than in the previous year; the heavier imprisonments, above ten years, fewer in number, though more of them are for life; and the executions are also fewer, not averaging much more than one for each district.

The most remarkable feature in the Table is the increase in sentences of simple imprisonment, (*i. e.*, without labour,) which have more than doubled. As the bulk of these sentences are those in which men are sent to prison in default of security on proof of what is called "bad livelihood," they will diminish very considerably in future years, for the Legislature has now allowed the exaction of labour from this class of offenders. We can only ascribe the increase in sentences of this kind to increased energy on the part of Magistrates; and although it has added considerably to the difficulty of managing the jails, it has no doubt contributed largely to the security of the public. The system is, however, liable to abuse if used without great discrimination, and must be carefully watched.

In Calcutta 771 prisoners, 230 of whom were Europeans, received sentences of one month and under; in Alipore, 522; in Moorshedabad, 319; in Baraset, 224; and in Tipperah, 210. It is probable that many of the Calcutta and suburban cases fell under the conservancy and other Acts especially affecting large towns; but many are due to the leniency of Magistrates or their ignorance of the facts of former convictions. Cases of habitual thieves being sentenced for fifteen days or a month are by no means uncommon.

This leniency of sentence in the case of habituals is a great evil. Much of the difficulty arises from the want of any efficient means of bringing up and proving previous convictions. This can only be overcome by insisting on the police keeping themselves informed of the bad characters of their circles, and orders for the careful maintenance at each station of the register of such characters have been recently given.

Three thousand five hundred and fifty persons were flogged, 3,163 for a first offence, and 387 on re-conviction; 292 persons were sentenced to rigorous imprisonment in addition to corporal punishment. There was, it may be said, one person flogged for every eight persons imprisoned.

Increase of sentences of simple imprisonment.

Districts in which short and long sentences were respectively most predominant.

Sentences of whipping.

CHAPTER VII.

PRISONS.

LAST year's report contained an exhaustive account of the reforms introduced by the Lieutenant-Governor in the jail system of Bengal, and a full statement of the principles upon which it was now to be worked. The period that has elapsed since has been devoted to carrying this out in practice and giving effect as far as possible to the views there enunciated. The Department has been, in fact, in a transition state. Mr. Heeley, as Inspector-General of Jails, has continued to do full justice to the expectations formed of him. He has gone thoroughly to the core of all matters connected with jail discipline and management, and the Lieutenant-Governor has had to thank him for much valuable work and a lucid report. He is engaged at present in compiling a revised Jail Code, and has given much time and attention during the year to the examination of the state of individual jails. In truth, as in the entire absence of good jails in Bengal, we cannot with our limited means make new and perfect jails all over the country at once, the Lieutenant-Governor has always assumed that our main care must be to make the most of the jails we have by improving each as its individual circumstances and peculiarities will best admit. This is the more necessary, as the greatest difficulties in respect of mortality, and in some other respects, that we have to contend with, are not so much general to Bengal as confined to some particular jails, to which most special attention is given.

The reforms introduced in the last two years in the Bengal jail system have been much criticised in several quarters, but no one maintains, or can maintain, that, except in so far as (in common with most provinces in India) a great improvement had been wrought in the sanitary condition of the jails taken as a whole, they were otherwise in a satisfactory state. It cannot be alleged that the buildings were decently fitted for the purpose; that the discipline was good; that there was any tolerable classification and separation of the prisoners. We do not allege that we have even yet made them satisfactory, or that we soon shall. It is a great and very difficult work. But the Lieutenant-Governor believes that we have made a good beginning, and that Mr. Heeley is efficiently carrying out very great and beneficial improvements in the buildings, and in the discipline and the methods of our jails.

Criticisms on the Lieutenant-Governor's reforms.

As regards sanitation, it is not to be supposed that the great improvements effected in past years have brought the jails to a satisfactory state of health. The statement in the margin shows the mortality in each

					Ratio per cent. of deaths to mean population in Jail.	
Total number of deaths during	1857	...	2,120	...	12'09	
"	"	1858	...	2,800	...	13'51
"	"	1859	...	2,116	...	10'82
"	"	1860	...	2,440	...	13'29
"	"	1861	...	1,456	...	8'88
"	"	1862	...	1,306	...	7'50
"	"	1863	...	1,711	...	9'52
"	"	1864	...	1,122	...	6'17
"	"	1865	...	1,122	...	5'95
"	"	1866	...	2,347	...	10'59
"	"	1867	...	1,187	...	6'88
"	"	1868	...	989	...	5'05
"	"	1869	...	1,029	...	5'24
"	"	1870	...	864	...	4'51
"	"	1871	...	759	...	4'01
"	"	1872	...	1,063	...	5'10
Mean					8'16	

year from 1857 to 1872. Roughly speaking, it may be said that whereas the mortality used to amount to 10 or 12 per cent., it had come down, in the latter years of Dr. Mouat's incumbency ending in 1870, to about 5 per cent. This is still a very heavy rate for an adult and

able-bodied population, among whom are comparatively few old men. But it may be feared that nowhere in India have we learned to reduce the jail mortality to that of the ordinary population. The Lieutenant-Governor fears it is not possible to bring the death-rate below that of the free population. The excessive mortality of former years we have overcome in most jails, but further reduction is very difficult, and it is because we have *not* discovered any means by which, while maintaining the semblance of a prison, we can reduce the death-rate to a really low point, that we cannot absolutely sacrifice everything to a doubtful attempt to make a small alteration in the health of the prisoners. In fact the evidence on the point goes to prove that reasonable discipline and hard work, as compared with laxness of system, do not increase the death-rate, but rather have the opposite effect.

The daily average number of prisoners under confinement during the year was 20,489, or 1,570 more than in 1871. The increase is common to all classes—under-trial, convicted, and civil prisoners. The increase in the total aggregate number of prisoners passing through the jails during the year is remarkable, the number convicted during 1872 having been 5,342 more than in 1871. The Lieutenant-Governor has, however, dealt with the judicial statistics in Mr. Heeley's report under the heading of Criminal Justice.

A table of the ages of convicts on admission shows that there were only 327 who may be called juvenile, as being under sixteen years of age when convicted. There were only 32 under 12 years. There is in fact very little juvenile crime in Bengal; and it is this which makes it difficult to attempt to apply any regular reformatory system to the cases which do occur. The juvenile ward in the Presidency Jail is the only place in which this class of criminals can at present be

Juvenile crime.

conveniently brought together, and the Lieutenant-Governor has called for a scheme declaring this ward a reformatory.

The percentage of mortality for 1872 shows an increase, being 5·19 against 4·01 in 1871; but 1871

Mortality.

was an exceptionally healthy year, not only in jails, but in the country at large; while 1872 was marked by a serious outbreak of cholera, and by considerable unhealthiness of other kinds in the country generally.

Mr. Heeley discusses very fully and ably the question whether any of the increased mortality is due

Not affected by penal discipline.

to the change in the jail system and the stricter discipline now enforced. The opinions of the medical Superintendents on this point are sufficient on the whole to prove that this was not the case. Careful analysis of the death-rate in most of the principal jails has convinced the medical officers that there is no direct connection between the mortality and the improved discipline. Dr. Lynch shows that in Russa and Baraset, where no change of system was introduced, the death-rate rose, owing doubtless to the unhealthiness of the year; while in Alipore, where the new system was put in force with the greatest rigor, the mortality was 2·10 per cent. lower than it ever was before; and even if Baraset, which serves as a sort of out-hospital to Alipore, be taken into account, it is shown at page 110 that the combined death-rate of the two jails was lower by 1·02 than in 1871. It is true that some officers have recorded opinions of the contrary kind; but in fact these opinions are found on examination to rest entirely upon theory, and it so happens that they are contradicted by the statistics of the very jails of which those officers have charge. Dr. French thinks that the short-term men suffer most, but he seems to attribute this to mental depression rather than to penal labor; and the mortality in the jail (Burdwan) was certainly not more than might have been looked for from the state of the district generally, but the contrary. In fact, however, the statistics of every jail show that it is long-term prisoners to whom the first six months of their imprisonment are most dangerous, and that the short-term men, in spite of their penal labour, fare better than the others. Dr. Bensley of Rajshahye again, while in one sentence attributing an injurious effect on the death-rate to harder work and strict discipline, adverts in the next to the fact that the death-rate of his jail has fallen from an average of 8·73 to 2·33. The same may be observed of other places—Bogra having fallen from 10 deaths to one; Rungpore, from 13·10 per cent. to 3·59—facts quite opposed to the theories of the Superintendents in charge; and the Lieutenant-Governor has no doubt that the Inspector-General has arrived at a correct conclusion when he states that there is no evidence whatever that increased mortality is attributable to better discipline and harder work; and that while medical officers use judiciously the discretion which they have in respect of individual exemptions, there is no reason to fear the contrary.

In truth, the mass (nine-tenths) of the jails were as healthy or healthier in the past year than they ever were, and the increased mortality

Causes of increased death-rate.

is due to three or four notoriously unhealthy jails, where, owing also to

epidemics, the death-rate has unhappily risen beyond that of any recent year—very far beyond it indeed in one or two cases. These were the very jails in which we were forewarned and fore-armed, and in which we have attempted ameliorative measures instead of pressing the prisoners, though unhappily the taint in them has so far got the better of us. Extramural labour has also in some places proved unfavorable to health; but at Midnapore, where this was most marked, the work was stopped. The mortality had nothing to do with any change of system, the extramural system having been introduced under the former *régime*.

Of the 1,063 deaths that took place during the year, 135 were due to cholera; 37 of these being in Tirhoot, 20 in Julpigoree, 13 at Dehree, and 13 in the Presidency. There had been no cholera in these jails in 1871. Dysentery was worse than usual, causing 332 deaths, owing, perhaps, Dr. Lynch suggests, to the excessive rainfall of 1871 and subsequent malaria having told upon the health of the population for 1872. Fever again appears to be less fatal than is popularly supposed, only 125 deaths being due to this, of which 22 were at Backergunge.

Dealing more particularly with the mortality in individual jails, it may be noticed that the worst of these—Julpigoree, is a very petty place

—hardly a jail. The frightful percentage of mortality here (42·62) is due to an outbreak of cholera, which, as above noted, carried off 20 out of an average daily population of 61 only. There is nothing therefore in this result on which to generalize. The Lieutenant-Governor has since visited this jail and found it quite healthy, and apparently the present accommodation is excellent for the number of prisoners confined there. Tirhoot and Chumparun will be specially noticed below. The rate at Baraset, taken with Alipore Jail, is not unfavorable (4·7); on the contrary, it is better than it ever was before; but precautions have been taken to prevent any overcrowding of the aged prisoners and invalids, who form the chief part of the inmates at Baraset. The unhealthiness of Hooghly (9·03) is still not accounted for. The Inspector-General has been told to pay rigorous attention to this jail, and endeavour to find out what is the matter with it.

In Backergunge (15·59) it is clear that something must be radically wrong. This jail has been a constant subject of anxiety; and we are now altering the entire structure of the jail, erecting double-storied barracks, and putting in arched floors, and must persevere till we have remedied its state most thoroughly.

In Midnapore (8·7) the mortality was due to, we hope, temporary causes. It has been the subject of much discussion, and seems to have been more or less explained by the exposure at extramural labour in the quarries. The stone quarrying has been stopped, and it is hoped the evil has now been remedied.

In Russa Female Jail (8·33) further explanation has been asked for of the high mortality, which was, it seems, chiefly from dysentery. There is said to be an improvement this year, but the matter requires careful inquiry.

At Dehree (7·75) cholera and the general unhealthiness of the year accounted for much, and the evil was, it is believed, only temporary

The rate of Bhaugulpore district Jail taken with the Central Jail at the same place was not bad (3·77); but the Lieutenant-Governor is sorry to hear of a serious outbreak of cholera in 1873.

Gya (7·03) is clearly a bad jail, and under all the circumstances the Lieutenant-Governor has now determined to build a new one on a new site. Proposals for this are to be sent in at once.

The rate at Burdwan (7·18) was not more than might have been expected from the fever-stricken state of the district population.

Purneah, with a rate of 6·58, is also an unhealthy place, and we can only strive to improve the jail as much as possible. Of the 20 prisoners who died, it is noticeable that 19 were engaged on light, not penal labour.

Jessore (5·64) and Sylhet (5·61) show higher rates than usual this year. Here also improvement must be sought after.

At Moorshedabad (5·10) the new jail will soon be ready, and things should be better.

In the Presidency Jail Native (4·69) and European (8·99) we have to regret a falling back owing largely to cholera. Here no change was introduced by the hard labour system. The Lieutenant-Governor trusts this jail will recover its position. The mortality among Europeans was quite abnormal, three deaths being from liver abscess, two from typhoid, apparently brought into jail, while two were cases of men admitted in a weakly state.

In Patna (3·67) underground drainage experiments had been proposed to meet the cholera, which always haunted the jail, but cholera left before the work began. If this had happened after, it would have been considered proof of the advantage of underground drainage. As it is, we are unable to account for the improvement. We may certainly congratulate ourselves on the comparative healthiness of Patna, Rungpore, Dinagepore, Rajshahye, Dacca, and also of the Assam Jails as a whole.

On the whole subject of jail healthiness, it might almost be said that the only rule seems to be a rule of contraries, the jails at the unhealthiest places being the healthiest; *e.g.*, Chittagong and Noakhally, notoriously bad places, yet having healthy jails; Dacca (perhaps falsely) reputed unhealthy, and certainly shunned by Europeans, yet of late years having a very healthy jail; while even Rungpore shows a mortality reduced below average. On the other hand, jails at healthy places are very deadly, as at Backergunge, Hooghly, and Midnapore.

The singular contrast between the jails of Eastern Bengal, a country generally considered so unhealthy, and those of Behar, generally considered so healthy, is again most marked. Behar is undoubtedly very healthy both for Europeans and Natives, supports a great population, and sends out a surplus population such as no other part of India does. Why then, it may well be asked, are its jails so unhealthy? There is not a jail in Behar where there has not been frightful mortality within a few years, and where the average of 15 years is not very large. We have happily reduced the death-rate, formerly so frightful, in South Behar, except at Gya, where a bad jail may perhaps in some degree account for it; but still in North Behar we have a mortality

and a constant anxiety as to the jails far beyond that in most other parts of the country. All the jails there show a mortality above average; Tirhoot (20·89) and Chumparun (18·75) frightfully so. In 1871 overcrowding was alleged in Tirhoot as the cause. In 1872, 316 prisoners were transferred to other jails. The district is large and populous, and the number of short-term and weakly prisoners unfit for transfer coming into the jail is so great, that it is said to be impossible to deplete the place thoroughly. The Lieutenant-Governor sanctioned extensive additions and alterations, but these have not yet been carried out in spite of the very urgent orders given to let no consideration stand in the way. Further discussion has, however, it is said, become necessary. The Lieutenant-Governor has insisted on having discussion brought to a conclusion, and building begun and pushed on as rapidly as possible. The present building itself is a very open jail, with high, healthy-looking wards. Overcrowding apart, there is certainly no apparent reason for unhealthiness. This year a severe cholera epidemic, added to the epidemic sickness, has made the rate frightful; but even cholera apart, dysentery and other diseases are terribly fatal. His Honor is glad to learn that this year up to the middle of July there had been only 14 deaths in Tirhoot. Chumparun also is to all appearance a good healthy jail.

Looking to the persistent excessive unhealthiness of Behar jails as compared to those of Bengal on the one side, and to those of the similarly situated districts, with similar populations, in the North-Western Provinces on the other, the Lieutenant-Governor is haunted with the suspicion that the connection of Behar with Bengal, and the application of Bengal principles in regard to food, water-supply, beds, or we know not what, may have something to do with it. He thinks we should try to get a North-Western Province Jail officer and associate him with Dr. Lethbridge, of Punjab experience, and some of the best of our local officers, to form a committee to inquire into and report on the history and system of Behar jails. The Lieutenant-Governor of the North-Western Provinces is, with the sanction of the Government of India, to be asked if he could lend an officer temporarily for this inquiry. Meantime the radical improvements in the Tirhoot jail are to be pushed on, and no time will be lost in starting the new jail at Gya.

The general result of the Inspector-General's inquiries as to the effect of transfers on health is to convince the Lieutenant-Governor that we should not transfer Bengal men in large numbers to Behar, and that seeing how deficient Bengal is in central jails, we must supply more such jails there. The Lieutenant-Governor has settled that another new one must be built; and as Furreedpore is to be kept up as a district, His Honor will consider a proposition for building there a central jail for East Bengal.

Also the Lieutenant-Governor has decided that Rajshahye should be put on the footing of a central jail.

Where, as in Furreedpore, and perhaps Rajshahye, there is only a small civil station, if a medical man is Superintendent of the Jail he might also, His Honor thinks, if well qualified, have the general

superintendence of the civil station, a good first-class Sub-Assistant Surgeon being put under him to assist in that duty. This would save an increase of expensive appointments.

The improvement of the district jails and lock-ups of Bengal, and the building of solitary and punishment cells, the completion of the central jails, and the provision of separate *hajuts* for under-trial prisoners, have been subjects to which constant attention has been given during the year. Not so much actual work has been done as had been hoped for, but a very great deal has been planned and put in train, and with a budget grant of Rs. 6,87,000 for the year 1873-74 there ought to be considerable progress visible before long.

The central jail works have been getting on. Alipore is now completely sub-divided, and is for the first time in its history tolerably secure from the risk of combination and outbreak among the prisoners; while at Midnapore, Bhaugulpore, and Hazareebaugh, vigorous efforts must be made to push on the buildings more rapidly than heretofore.

New jails at Mymensing (on a new plan), at Nya Doomka, Lohardugga, and the Khasi Hills, have been sanctioned; much has been ordered and is doing to improve Dacca, Burrisal, Tirhoot, Jessore, and Dinagepore, and the scheme of separate *hajuts* is well advanced. The Lieutenant-Governor hopes the new model plan of a district jail, which is being tried at Mymensing, will answer expectations. There is a great need of providing small but decent European wards in districts where this class of prisoners may be looked for, and the Inspector-General has been told not to overlook this point.

Much discussion has taken place on the subject of guarding. The Lieutenant-Governor is quite satisfied of the necessity of increasing the staff of regular warders, while the police guard is correspondingly diminished. Also it is settled that in small lock-ups and *hajuts*, warders may be altogether substituted for police for *ordinary* purposes; and he hopes this will be carried out. At the same time the police must supply a regular guard when there are unusually dangerous prisoners. The Lieutenant-Governor has directed that in all new sub-divisions and new buildings it should be arranged, if possible, that the lock-up and *thannah* should be contiguous, so that with separate administrations one may have the support of the other.

The Lieutenant-Governor has accepted a scheme prepared by Mr. Heeley placing jailors on a graduated scale of salaries with regular increments. The commission system, carried to the extent it was, was pernicious in every way, and will shortly be done away with. Proposals for revising the whole establishment of under-jailors and warders are also in course of preparation.

There is a large increase in the return of jail offences and punishments. During the year the change of system in jail discipline must of course involve some increase of punishments at first, but it is hoped this will soon cease; the efficient Superintendent is he who succeeds

without severe punishments. The Lieutenant-Governor has expressed strong disapproval of any excessive resort to flogging.

A mark system has been introduced lately applicable to all convicts of more than two years' sentence.

The mark system.

Each man can earn by good behaviour and good work a certain limited number of marks, and may lose these by bad conduct. The prisoners again are divided into two classes, the habitual or dangerous, and those who are not. The former class earn by a certain number of good marks, not absolute, but modified, remissions of sentence. They will be allowed to earn their living under surveillance till their term expires. The others can earn absolute remissions. This system will, it is hoped, place the whole system of remissions and rewards on a more satisfactory footing. There will now be a tolerable guarantee that these will go by merit and not by chance selection. The prisoners will have tangible inducements to steady good conduct; while there will be less executive interference with the effects of judicial sentences.

Employment of prisoners.

The returns of convict labour show increased employment on manufactures, and diminution of useless jail servants.

The Lieutenant-Governor has, however, again dwelt on the advantage of providing penal labour for short-term prisoners in every jail and lock-up. Some improvement has taken place in this respect, but not so much as ought to be the case. Treadmills are being put up at several jails, and when the special inquiries now being made in England as to cranks and other mechanical appliances are complete, it is hoped that every place of confinement will in time have the means of exacting penal labour.

Some practical difficulty has been found in providing penal labour for all short-term men, and the Lieutenant-Governor has said that he does not object to the Inspector-General's exercising a discretion and looking to the nature of offences. He does not wish all short-term prisoners to be equally punished, absolutely and literally. He only does not wish to make so sweeping a difference as shall nullify altogether the work of judicial officers in apportioning sentences. At any rate, while means of hard labour are deficient, the Inspector-General may be allowed to select the classes of criminals for whose benefit they are to be used.

The great number of prisoners employed on miscellaneous duties is still unsatisfactory, though useless jail servants have been generally reduced; but it is reported that some jail officers seem very helpless about devising industrial employments. The central jails will, when completed, concentrate labour and make the outturn more satisfactory. In lock-ups the employment of a warder guard should lead to improvements, and secure some return for the labour which is now exacted in these places. The Lieutenant-Governor has approved of the general stoppage of extra-mural work, except for purposes of health and upon jail buildings, in the garden, or the brick-field.

The cost of supervision has risen from Rs. 34,543 to Rs. 41,397,

Jail finances.

but this was almost accounted for by the full salary of the Inspector-General being drawn this year, while there were savings last. The cost of

establishments had also risen from Rs. 2,62,737 to 2,68,176, but the difference is fully explained, and was not at all in proportion to the increase in the jail population. There was also an increase in the cost of Police guards from Rs. 1,96,620 to Rs. 2,09,311. Rations had of course cost more owing to the larger number of mouths to feed, and stood at Rs. 5,41,198, against 4,91,205; the rate per man was 7 annas 2 pies more than in 1871. Hospital charges were Rs. 27,769, and clothing cost Rs. 78,959, or 14,476 over last year. This last increase is not altogether explained. Contingencies also rose slightly to Rs. 63,378. Excluding the manufacture department, but including Jail buildings, the total expenditure was Rs. 14,98,658, against Rs. 13,20,606 in 1871. The increase is mainly due to increased activity in jail building, as well as to increased number of prisoners. Excluding also buildings, the total cost was Rs. 12,48,426, as against 11,50,987 in the previous year, or Rs. 60-14-10 per head, against 60-13-4 in the previous year. The net cost, after deducting profits (including profits of press), viz. Rs. 3,43,683, was Rs. 9,04,743-5-1½, as against Rs. 7,98,456, or Rs. 44-2-6 per head, against 42-3-5 in the previous year.

The general result may be accepted as satisfactory, showing improvement in discipline and labour effected without serious expense to the State. The European jails are naturally very expensive, and tend to raise the average much. Assam and Darjeeling are also unavoidably expensive places.

As regards profits from manufactures, it appears that, excluding

Manufactures.

Alipore, the final balance of profit on the outturn, minus the expenditure in the ordinary jails, was Rs. 90,900 against 1,00,300, in 1871. There was a much greater outturn of work, but a largely increased expenditure on comparatively unproductive and penal labour. The Lieutenant-Governor must repeat what he said last year, that our ordinary jails never were profitable to an extent to justify the sacrifice of system. He feels satisfaction at the general results of the present year, attended as they are with improved discipline and new penal labour. At the same time he thinks gunny-weaving may be extended, and that there is room for improvement in paying occupations. Prisoners, if properly looked after, ought certainly to show something for their work; and Superintendents must not, while enforcing penal labour, lose sight of the prospect of earning a legitimate profit.

On the whole however, thanks to the great and continued success

Alipore mills.

of Alipore, the net balance of profits for the year, exclusive of works done by the Alipore Jail Press, was Rs. 2,49,454, against 2,24,700 in 1871. The profits of the Alipore jute mills were Rs. 1,81,500, against Rs. 1,24,300. This is explained by the great fall in the price of raw jute, which "caused the year to be one of unexampled prosperity for the trade of gunny-weaving. Dr. Lynch, however, warns us that a succession of such years is not to be looked for; it is probable that the extreme limit of profits has been already reached; competition has begun to an extent which threatens to destroy profits altogether." Whether this is a correct anticipation or not, it is certain that it is very

important to develop the manufacture department of central and district jails to meet the very probable fall in the net returns of Alipore.

The net profits of the Alipore Jail Press are shown at Rs. 94,229, but those are only book-earnings. The press has no cash receipts.

Looking to the returns of the district jails, it appears that in eight the expenditure on manufactures actually exceeded the returns from

Twelve jails just cleared their manufacturing outlay by a mere fraction; while in only nine jails were the profits really large. This has, in fact, always been the state of things as regards the profits of Bengal jails; the profits were made up of Alipore (actual and press account) and a few other jails; the majority gave little or no real profit. Rajshahye, Hooghly, Mymensing, Purneah, and Cachar, were the jails where in the past year the profit was largest in proportion to the expenditure.

The following table exhibits jail expenditure and receipts in a compendious form.

Summary of receipts and outlay.

HEADS.	Jails.	Lock-ups.	Total.
EXPENDITURE.	Rs. A. P.	Rs. A. P.	Rs. A. P.
General supervision	41,396 15 6	...	41,396 15 6
Establishment, fixed	2,40,743 1 7	22,810 9 8	2,63,553 11 3
Ditto, extra	4,621 13 5	...	4,621 13 5
Rations	5,03,198 15 3½	37,099 1 2½	5,41,198 0 6½
Hospital charges	27,331 2 4	438 5 11	27,769 8 3
Clothing	77,884 8 3½	1,074 13 11	78,959 0 2½
Contingencies	56,109 0 6½	7,179 8 3½	63,278 8 10
Petty repairs	15,784 11 8	2,152 8 0	18,236 15 2
Police guards	1,65,918 1 1	43,393 1 9	2,09,311 2 10
Total	11,33,078 5 8½	1,15,347 12 3	12,48,426 1 11½
Cost of Manufacture Department	5,33,877 5 4½	...	5,33,877 5 4½
Grand total	16,66,955 11 1½	1,15,347 12 3	17,82,303 7 4½
Receipts from sale of manufactures and value of press work	8,77,560 2 3	...	8,77,560 2 3
Net expenditure	7,89,395 8 10½	1,15,347 12 3	9,04,743 5 1½
Cost of Jail buildings in accounts of Public Works Department	2,40,079 0 0	9,553 0 0	2,50,232 0 0

CHAPTER VIII.

CIVIL JUSTICE.

THE High Court's report on the administration of civil justice for 1872 has not been received, but, as in former years, certain statistical tables have been furnished, which will be found in the Appendix.

The total number of suits for disposal coming before the High Court in its Original Jurisdiction during the year was 1,340, as against 1,283 in 1871. Of these only 641 were decided, leaving pending 699 cases, as against 578 at the close of 1871. The increase was in general litigation, and is attributable probably to reviving trade in Calcutta.

The business of the Calcutta Court of Small Causes during the past year recovered from the falling off which characterized it during 1871-72. The total number of suits has risen to 34,843 from 31,586, or to a higher figure than in any year since 1865-66. The amount in litigation, Rs. 16,23,110, has also increased, but of late years there has been a falling off in this respect; suits for sums over Rs. 500 having considerably decreased. The improvement this year is here also attributed to greater briskness of trade in Calcutta. The court fees realized Rs. 2,22,528, leaving a balance of Rs. 44,456 after paying all expenses.

In the analysis of results of trials, the Small Cause Court Judges, after taking into account as in favour of defendants in whole or part (1) all cases dismissed, (2) all cases non-suited, (3) all cases in which plaintiff only got a partial decree, find that there were 15,182 cases decided in favour of plaintiffs, against 7,946 for defendants. Adding to the figures in favour of plaintiffs all cases compromised, the total is 29,515 for plaintiffs against 7,946 for defendants, or in the proportion of about 3 to 1. This the Judges consider a natural result in suits of the class. It is observable, however, that out of 35,719 cases for disposal, only 10,007 were actually tried out, while 11,090 were compromised out of court. Including *ex parte* cases, the claims of plaintiffs were wholly decreed in 12,234 cases, and partly decreed in 2,948.

On the appellate side the High Court sat for 255 days, and disposed of 7,562 appeals and applications, leaving 2,604 pending at the end of the year. Among the appellate business disposed of, 204 were

Appellate High Court.

regular and 1,100 special appeals, while 1,218 were criminal cases; 3,856 were cases of miscellaneous orders on applications in and out of court. There was, as compared with last year's returns, a falling off in the number of regular, special, miscellaneous, and criminal appeals disposed of, but a large increase in miscellaneous orders.

The first table below shows the totals of the various kind of original civil suits instituted in the courts of the interior during the year; while the second shows the number of cases under trial and the numbers disposed of by the various classes of courts.

I.

Instituted in	Suits for money.	Under Rent Law.	Other suits.	Total.
Small Cause Courts	44,940	.....	.....	44,940
Moonsiffs' Courts	1,15,225	93,411	36,703	2,39,540
Sub-Judges' Courts	4,621	659	1,793	7,053
District Judges' Courts... ..	6	...	18	24
Revenue Courts ... ..	.....	7,027	.....	7,027
	1,04,793	1,01,077	38,514	2,38,384
	In 1871 ...			2,74,580

II.

Classes of Courts.	Total of suits for disposal.	Total disposed of.
Small Cause Courts	47,789	45,002
Moonsiffs' Courts	2,06,569	2,39,389
Sub-Judges' Courts	9,559	6,923
District Judges' Courts	301	203
Revenue Courts	8,933	6,028
	3,63,260	2,98,145
	In 1871 ...	3,27,431
		2,75,473

The business of the Appellate Courts shows a corresponding increase thus :—

	Total number of appeals for decision.		Total number of appeals decided.	
	1871.	1872.	1871.	1872.
Sub-Judges' Courts	13,170	14,665	9,169	10,356
Collectors' Courts	706	446	604	375
District Judges' Courts	20,565	21,537	6,257	6,919
{ Civil	5,681	4,719	2,764	2,495
{ Revenue	60	40	53	34
High Court ... { From Original Jurisdiction	489	404	285	294
{ Regular from District Courts	2,830	2,736	2,079	1,100
{ Special				
	43,501	44,637	21,251	21,888

For further judicial statistics reference may be made to the appendix.

In the absence of any report from the High Court, in whose hands

Increase of litigation.

lies the task of supervising the administration of Civil Justice, it is hardly possible to understand fully all that the figures in the tables convey. It is, however, very obvious that the chief feature in the year's history has been a considerable increase in litigation, with which the courts, and especially the appellate courts, have not been able altogether to cope.

Complaints are still made of the delays in the disposal of rent

Rent suits.

suits by the Civil Courts, and a large temporary increase to the number of Moonsiffs has been made since the year closed to clear off the pending arrears. The High Court Judges had been requested to favour Government with an opinion upon the practical effect of the change under which these suits were removed from the Revenue to the Civil Courts, but have as yet only considered the matter with reference to the sufficiency of the Judicial Agency required for the disposal of the extra work. The opinion of executive officers seems generally to be that the delays and extra cost of the Civil Courts are not compensated for by the greater regularity of the procedure and elaboration of the decisions. The whole subject is, however, one for careful consideration in connection with the rent question in Pubna and other districts, and need not be further discussed here.

A weak point in the working of these Courts is the insufficient supervision exercised by the superior Judges over the inferior Judges, and by the native Judges over their subordinates.

It would seem from the administration reports of some Commis-

Estimate of the Judicial system.

sioners that the system of civil justice now in force is not productive of complete satisfaction. The continued adjournments, the power of protracting cases which lies in the hands of a wealthy litigant, the difficulty of executing decrees on the one side, and the holding decrees for years *in terrorem* over a debtor on the other, the enormous extent to which interest is allowed to accumulate, and the general tone of narrowness which is alleged to characterize the decisions of the lower civil courts, are all matters giving rise, it is said, to complaint. In Assam it is stated that a too rigid adherence to the principles of Hindoo Law by the Bengali Moonsiffs of the province inflicts hardship on the Assamese, whose social observances differ in some respects from those of rigid Hindooism. Hence there is a strong disposition among the people to settle their disputes by village arbitration, and the Civil Courts are made use of frequently only as Courts of appeal from the decisions of arbitrators. The Lieutenant-Governor would be disposed to encourage this recourse to arbitration. In Orissa, again complaint is made that the Bengali pleaders who act as Moonsiffs fail to understand the people, and are under no supervision. They are described as being so crammed with law and High Court precedents, that they have no room left for common sense and study of the people.

During the year the High Court circulated to Judicial officers an important Circular by the Chief Court of the Punjab on the subject of usurious interest. The Chief Court points out that although under the Act repealing the usury laws interest is to be adjudged at the rate, if any, agreed upon between the parties, yet this does not exempt Civil Courts from the duty of examining the contract made and inquiring into the circumstances under which exorbitant interest may in any case have been apparently agreed to. The existence of undue influence or inequitable pressure, such as may often be found to exist in the relations between a native money-lender and an ignorant peasant, must be scanned by the Court, and if it is found that fear or ignorance led to the usurious contract, the Courts may set it aside and award what is just. Again the Courts are warned not to award such rates of interest subsequent to decree as to make it worth the creditors' while to keep their decrees unexecuted. The Lieutenant-Governor considering these directions most salutary, has caused them to be widely published in the vernacular for the information of the classes most affected by them.

At pages 96 *seq.* of last year's report the Lieutenant-Governor stated in a general way his views with reference to the whole civil judicial system as it now is, and expressed his doubts and fears as to its efficiency and mode of working.

The Lieutenant-Governor's views. During the year under review much consideration has been given to this subject in connection with the Hon'ble Mr. Fitzjames Stephen's minute on the Administration of Justice in India, and other papers by the present Chief Justice, the Hon'ble Mr. Hobhouse, Sir Erskine Perry, and a Select Committee of the Indian Council. The Lieutenant-Governor's views were communicated to the Government of India at length, and to the following effect.

Without giving assent to all the particulars of Mr. Stephen's plan, Sir G. Campbell did for the most part concur in that gentleman's general views; as also in those of the Special Committee of the Indian Council, and of Sir Erskine Perry. He felt that only radical measures could cure the deep-seated evils of the present system and reform the present practice, which encourages artificial litigation, subordinating to this the interests of substantial justice. His own view was that what was most

Procedure. wanted was a better *practice* in respect of procedure. The law of procedure may itself no doubt be materially amended; but it is not so much the use of the actual law as its abuse, owing to inveterate habit and want of supervision, that causes the most crying evils. His Honor would wish to see all appeal as of right put a stop to, and a very active supervision and power of revision substituted. A complete system of inspection and executive control over the judiciary should take the place of the present system, under which there is no adequate supervision or unity of control whatsoever.

Turning more particularly to the principal questions discussed in Mr. Stephen's minute, and first, with reference to the distinction that at present exists between the regulation and non-regulation systems,

and the union or separation of judicial and executive functions, the Lieutenant-Governor was not prepared to give a general answer. Wherever, as in much of the Bengal non-regulation territory, the population is so sparse and primitive that the Government cannot really afford to give both an executive and a judicial officer without extending their local jurisdiction over an unreasonable area, it was better, the Lieutenant-Governor thought, that single officers should, within a moderate tract, exercise both functions. But in that case they should not be hampered by a strict procedure, but should act in a simple and direct way as a sort of arbitrators among a primitive people. Where the work is, however, heavy and sufficient to give employment to two officers, then one should be told off to judicial work.

In the Lieutenant-Governor's opinion it was not desirable absolutely to divide the Civil Service into two separate services, executive and judicial. A man is often not the best judge of his own capacity when he is young, or sometimes even when he is old. The whole Civil Service is under the present system trained in a way which will admit of its members taking up judicial functions if turned to them early enough; and it is better, by a sort of process of natural selection, to let the service fall into two general channels, executive and judicial, reserving to Government the power to change them when it is clearly for the advantage of the public service, owing to failures or other reasons. Something like what Mr. Stephen calls the Bombay system is perhaps the best, *i.e.*, that men after a few years' general experience should take to one line or other, becoming if they elect, or are selected, for the Judicial Department, Assistant Judges; and that is practically what the Lieutenant-Governor has lately recommended, and in part carried out, in connection with the scheme of establishing parallel lines of promotion in the executive and judicial branches.

The Lieutenant-Governor would not admit Barristers to judicial appointments in the interior. The being a Barrister does not necessarily imply any real legal training, and the experience which Government has had of the open market shows that it could not in this way get really good men without paying exorbitantly high salaries, if indeed it could get them at all. The men we can get would be much inferior to those got for the same money under the civil service system, and their introduction would much discourage and introduce a great element of uncertainty into the Civil Service.

Nor would the Lieutenant-Governor make natives eligible to Civil Service appointments on Civil Service pay. The Civil Service is a machinery for importing a supply of a foreign article, *viz.* educated Europeans; and Government must pay a price for this article, imported from a dear and cool country to a cheap and hot one, very much more than it need pay for the cheap indigenous and acclimatized article. Moreover, in His Honor's opinion, some functions, *e.g.* those of criminal Judges, are not nearly so well exercised by a native, however able, as by a European. The Lieutenant-Governor would gradually

increase the number and position of offices which natives may fill, but would keep these offices and the pay attached to them distinct from the Civil Service.

As respects the details of the division of the service into two branches, the Lieutenant-Governor concurred with Mr. Stephen's general view, that executive should be combined with criminal functions, so far as regards the repression of, and inquiry into, crime, and the disposal of criminal cases of inferior importance, particular Magistrates being told off as much as possible for the trial of such cases. But as regards criminal cases of the first importance and magnitude, it is well that they should be tried by tribunals recognized as distinctly judicial and apart from the executive, if we can only arrange—and this is very important—that they should come to the case before the evidence is stale and the witnesses are bought off. After many rehearsals native evidence loses most of its value, and there is sometimes palpable and evident failure of justice when witnesses are tampered with, or got out of the way in the long interval before the sessions trial under the present practice. The new Criminal Procedure Code does much to remedy this evil; but it would certainly be desirable that cases committed should be taken up at Sessions more speedily than is now the custom.

The Lieutenant-Governor then would have two branches of the service—(1) the executive and correctional-criminal; and (2) the judicial, comprising civil justice and criminal justice in the higher grades. The separation, so far as the Civil Service is concerned, would take place after a man had had some experience in executive and magisterial work. As regards the native service, the separation might take place from the beginning as at present; but the officers should be specially interchangeable when it is for the benefit of the public service. Natives trained in the civil line would not become independent criminal Judges; but the judicial trial of important criminal cases would be in the hands of Civil Servants, assisted by assessors (or juries, if there be juries), or possibly by native Judges acting as assessors.

On the question of the constitution of the courts of first instance, the Lieutenant-Governor thought that ordinary cases, both criminal and civil, should be inquired into in the first instance by a single Judge sitting alone; subject, in civil cases especially, to the deputation of one or more Judges to sit along with the first for important or difficult inquiries. Collectors and such officers might also be sometimes associated (as has been suggested by Sir E. Perry), where it is desirable for the civil court to be strengthened by the special experience of the Revenue or other Departments. Great abuses result from inferior native Judges sitting alone without check of a colleague or any other check; and besides the inspection now wanting, it is very desirable that a superior officer (something like the chief Small Cause Court Judges) should sit judicially with them from time to time, both adequately to dispose of difficult cases, and to give a tone and method to the courts.

The Lieutenant-Governor was strongly in favour of making the civil court amenable, and such officers who now conduct local investi-

gations, recognized judicial officers and assistants to the local Judges. He was also in favour of making use of punchayets or similar arrangements as freely as possible, as is suggested in Mr. Stephen's minute. Some discredit is attached to them in the Punjab, in consequence of the careless use, or rather abuse, of them; but well looked after, and properly worked, they are infinitely better judges of fact than our courts can, in five cases out of six, ever hope to be; and at any rate the people would feel under a punchayet system that whatever error or injustice was committed, was the work of their own peers—not of the Government. It is in the class of petty cases that the most disproportionate harassment and expense is caused to both parties under the present system. With the institution of punchayets, to whom the courts could refer such issues of fact as are best settled locally, much of this would disappear; and the benefits would almost certainly outweigh the few inevitable drawbacks.

The Lieutenant-Governor would also strongly advocate the plan of giving powers to village headmen (or *prud'hommes*) as honorary judges, arbitrators, or moonsiffs, to dispose of petty cases on reference. As pointed out by Sir E. Perry in his minute, this plan would in many parts of the country be highly popular. The office would be an honorary one, and the holders would be amply repaid by the social status conferred thereby. The influence of this feeling, even in Bengal, was most strikingly manifested, and its usefulness for the purposes of administration most signally proved in the course of the census operations.

As regards appeal, the Lieutenant-Governor would substitute throughout the principle of revision for that of appeal as of right. This would get rid of the question as to

Appeal.

Revision.

whether appeal is to be on law or fact, or both. He would give the Appellate Court absolute power to reject an appeal, and to interfere without appeal. Whenever, looking to the nature of the case, the character of the lower tribunal, and the decision, it thinks that no appeal is required, it would not interfere, and should reject the appeal. When it thinks revision or consideration desirable, it would permit appeal or revise without appeal.

Naturally the existence in a case of doubtful or difficult points of law would be ground for revision. But there should be no bar to revision in matters of fact where the interests of justice seem to require it in the eyes of a really competent tribunal. The Lieutenant-Governor has a very poor opinion of the power of the inferior courts, particularly the native courts of original civil jurisdiction, to deal thoroughly with facts. If they formed their judgment of facts in their own way, they would be much oftener right than wrong, though natives are very credulous and influenced by rumours, secret assertions, &c., and they would pretty often be wrong also. But under our procedure they think themselves bound by artificial rules, and look more to what the Appellate Court will say than to justice. They have learnt something of law, but scarcely anything of dealing with evidence in a judicial way.

In a recent lecture by Mr. Justice PhEAR, delivered before the Social Science Association, that learned Judge stated broadly his

conviction that "there is a want of aptness, or an imperfection in the conduct of the process of trial in most courts of first instance in India, which necessarily favours the prolongation of litigation, and fosters dishonesty and vicious laxity in the manipulation of evidence." "Our Judges are (he said) very respectable theoretical lawyers, but by reason of want of information and training, they are generally deficient in the power of working efficiently the machinery of trial, and in the majority of cases the view of the facts upon which the decision rests is not accurate, often not even approximately so." As the Lieutenant-Governor remarked at the time—"No doubt there was a good deal of law about, perhaps too much law, but he thought, and Mr. Phear flatly told them, there was very little fact in the courts of the country. Law without facts was worse than useless. The law is the mere binding of the book: the facts are the contents inside."

For these reasons His Honor held that there should always be in one superior court a power of revision on the facts as well as on the law. But when there has been a revision by a competent appellate court below the High Court, he would not lightly allow revision by any ordinary Bench of the High Court. There should be only exceptional and special revision on very sufficient grounds, by a Bench of not less than three Judges of that court concurring. At present the decisions of the Division Benches of the High Court, determined, as those often are, by the voice of the senior only of the two Judges that form the Bench, are much wanting in authority. As Mr. Justice Jackson has remarked—"The judgments of the High Court, to be useful in the degree expected of them, must be comparatively few, thoroughly well-considered, and pronounced by a sufficient number of voices after sufficient argument. At present, excepting what are called Full Bench cases, hardly any of our decisions answer this description."

Coming, then, to the constitution of the courts of appeal, or revision, or whatever they may be, the Lieutenant-Governor's opinion was very strongly that of almost all the best authorities, Sir E. Perry, Mr. Stephen, and others, that the present district appellate courts are far too weak and must be strengthened; that being strengthened, their Judges should be plural; that the plurality should consist as much as possible of a European and one or more native Judges sitting together. For appellate purposes the present judicial districts should be enlarged, and there should be a strong revision tribunal at the chief place of each,—say ten or twelve for the whole Bengal Regulation Provinces.

The Lieutenant-Governor would allow revision by these tribunals in all cases, however large in amount, reserving to the High Court power either to admit an appeal or to order a case to be sent to it direct, when, owing either to the importance of the legal questions involved, the peculiarity of the case, or its magnitude, it is thought better that it should be revised by the highest tribunal.

Under the system above described, it might be hoped that the quantity of work in the High Court would be very much diminished, and that important questions or important cases would be very gravely and deliberately decided by strong and adequate Benches, instead of

the present system of regular and special appeal, under which the whole power of the highest court is exercised simultaneously by half-a-dozen Benches of two Judges each, working like a mill to clear off a multitude of cases, very badly placed before them. This multitude of decisions of badly or insufficiently argued cases is a very great evil. It deprives the decisions of the court of real authority, and at the same time it embarrasses and makes vicious the proceedings of the lower courts, who are always panting for precedents and *legalities*, and who seem generally to seize upon the worst decisions. The Lieutenant-Governor has dwelt upon this at page 96 of the Administration Report for last year.

The difficulty about law reporting, alluded to by Mr. Stephen, is really the same as the above. We cannot blame reports which give all the judgments, though they do much harm. On the other hand, the Lieutenant-Governor could but feel it most objectionable that an irresponsible knot of lawyers like the law reporters should sit as it were in judgment on the Judges, and decide what is to be taken as good and what rejected as bad. Under the present system, Mr. Stephen's proposal to bring the law reports under the control of the Legislative Department would be an improvement; but the true remedy is, the Lieutenant-Governor thought, to reduce the quantity and add to the weight of the judgments of the High Court, and then let them all be reported.

One important part of Mr. Stephen's proposals in connection with this part of the subject cannot, however, be passed over, viz. that the Government should have power to consult the High Court on abstract points, and that the Court should decide on these with the same authority as in regular cases. This was, in fact, the practice in old times; and looking to the circumstances of the country, it was, in the Lieutenant-Governor's view, by far the best. The English judicial habit is to avoid generalisation as much as possible, to narrow the decisions as much as possible to the particular cases, never to decide on a broad issue when a case can be decided on a narrow one. Consequently questions affecting the whole well-being of the country are sometimes kept in doubt and contradictions for years, tossed about according to the interests of private parties, the necessities of lawyers, the varieties of decisions of Benches in various phases of similar cases, and so on. It is most desirable that when a question of great importance arises, the High Court should set at rest the law, leaving to the Legislature a clear path either to accept the law so settled, or to amend it, and saving the country all the turmoil, expense, and excitement of long legal campaigns, in which the lawyers are the only persons who reap any advantage.

With respect to Privy Council appeals, if the High Court business is elevated as above proposed, there will be infinitely less necessity for an appeal to so distant and expensive a tribunal as the Privy Council,—an appeal which is practically forbidden to all but millionaires, whose appetite for litigation is as unlimited as their purse. The Lieutenant-Governor

Law reporting.

High Court Rulings.

Privy Council Appeals.

quite agreed with those who think that there should be no appeal to the Privy Council on facts. The High Court is constituted in a way to be much better fitted than the Privy Council to deal with Indian facts, consisting as it does of men of local experience sitting together with lawyers. The Privy Council contains, and it may be said by law can contain, not a single man of local experience and knowledge of the language and people of India. The decisions of fact in the Privy Council have almost necessarily rested with one or two old heads of the Calcutta Supreme Court, who, however able and experienced individually, ought hardly to be allowed to overrule on questions of fact the High Court, which is, or ought to be, the better qualified tribunal. In former days they seldom did so; latterly a great deal, and it is, the Lieutenant-Governor believed, notorious that their decisions in this respect have not of late given satisfaction in this country. There is, the Lieutenant-Governor thought, no reason whatever for such an appeal on the facts to the Privy Council.

As regards appeal on points of law, the Lieutenant-Governor did not propose in India to confine appeal to submission of a case stated, thinking it better to let courts of revision judge, and state a case for themselves, if necessary. But the Privy Council being so distant, and not constituted for administrative action, and the High Court being thoroughly competent to state a case, the Lieutenant-Governor would absolutely confine appeal to the Privy Council to very important questions of law on a case stated by the High Court.

If, however, appeal on facts to the Privy Council must be retained (and, as far as the Lieutenant-Governor could see, only a few English lawyers would benefit by this), then most assuredly some Judges of Indian local experience should sit on that tribunal. There are many such who would be very glad to act for a very moderate remuneration. Even in that case, however, the Lieutenant-Governor would certainly confine appeals to cases valued at over a lakh of rupees, and in no case would he allow any appeal direct from original or district courts to the Privy Council.

When an appeal is made to the Privy Council, execution should not, the Lieutenant-Governor thought, be stayed except in cases where the High Court think it equitable so to do. The views put forward in Mr. Hobhouse's minute on this subject entirely commanded His Honor's assent. Nothing could be more unjust than that a litigant, who has been worsted in the highest court of this country, should be able to harass his adversary and evade justice by entering an appeal to the Privy Council, which he may not eventually prosecute, or which may lie by for years.

The Lieutenant-Governor thoroughly agreed with Mr. Stephen and those who think that the executive supervision of the courts should be in the hands of the Government, and that no purely English lawyer, however able, is competent to undertake this. This view was enunciated in that part of the last Administration Report already quoted, and the question is even now under the consideration of the Government of India.

If Mr. Stephen's plan for convening and arranging provincial or large district courts be adopted, the mode of working them must a good deal depend on the nature of the executive arrangements adopted. If we are to have compact and comparatively small administrations in one block, it might be done by having a Judicial Commissioner in each, under whom the working might be placed. If we have a Government of several different provinces as Bengal now is, and must have great Commissionerships of Behar, Assam, &c., and so on, it might be worked by, or under direction of, Commissioners of provinces.

Short of radical reform of the whole system of administering justice, and putting aside as a separate question the executive supervision of the courts, the most important point requiring settlement in India is the constitution of the district or provincial appellate courts inferior to the High Court, and the rules under which appeal to them, or revision by them, is to be regulated. The Lieutenant-Governor believed it would be found that the Judges of the High Court agreed with the other authorities in most decidedly thinking that the present local appellate courts must be reformed, and stronger courts in larger districts, divisions, or provinces, substituted. His Honor pressed this proposal on the consideration of the Government of India. All the authorities were agreed that reform is called for. There was a very fair consensus of opinion as to the way in which it may best be effected, and the sooner it was taken in hand, he thought, the better.

Since the letter containing the above views was written, a scheme

Mr. Hobhouse's scheme of law-reporting.

of law-reporting has been promulgated for opinion by the Government of India, to which the Lieutenant-Governor has not felt himself able to agree. It is proposed that a reporter, or staff of reporters, be maintained for each High Court, and be appointed, removed, and paid by Government; that every Court or Bench shall have the right of *forbidding* the report by a Government reporter of a case decided by itself; that the High Court at large shall have the right of *commanding* the report by the Government reporters of a case decided by itself, or by any of its divisions or branches, in such form as they think right; that, subject to such powers in the Judges, the reporters shall be under the control of the Government; that there shall be a central editor or chief reporter, also appointed, removed, and paid by Government, to whom the several provincial reporters shall send their reports when prepared; that the chief reporter shall finally decide (subject always to the powers reserved above to the High Courts) what cases shall be the subject of a report, and as to the fulness and form of each report; that the reports, when published by the chief reporter, shall have the same authority all over British India as the reports of the High Court cases now have in their respective provinces; that no judge shall be bound to hear any other report cited, or shall receive or treat it as an authority binding on him.

The Lieutenant-Governor does not think this scheme would work well. He has a strong objection to allowing a lawyer reporter to sit in judgment on the judges. He does not believe the High Courts at

large would ever be got to select cases to be reported; failing which everything would centre in the chief reporter, and it would, the Lieutenant-Governor thinks, be better to make him a superior High Court for all India than to give him the enormous irresponsible powers proposed. His Honor adhered to his views already expressed, that we should first improve the judicial system, so as to get more weighty and well-considered decisions, and then merely secure their authenticity; and, secondly, enable Government to call in the High Court to decide any particular question of importance propounded to them. If we are to interfere with the free use of judgments as delivered, he would go the whole length of Mr. Stephen's plan, otherwise he would not interfere with free reporting.

A question was raised upon a remark of the Judges of the High Court in their Report on Civil Justice for 1870, in which they deprecated the

Execution of decrees. system which at present obtains in respect to the execution of decrees. The Court observed that "process in execution is protracted over 20, 30, 40, or even 50 years, remote descendants being frequently called upon to pay the debts of their ancestors." The Lieutenant-Governor concurred generally with the views of the High Court, that a legislative limit should be imposed on the execution of decrees. His Honor took also the opportunity of saying that he thought that decrees should not be assignable by sale or otherwise. He believed that the absence of anything like the old English prohibition against selling rights not in possession, and the permitting complete free trade in claims and decrees, together with the *benamtee* system, were the most fertile causes of our courts being abused, and he feared that the evils of excessive delay in the execution of decrees would hardly be efficiently met with justice to decree-holders, unless the Government dealt radically with the vicious *benamtee* system.

The total number of suits decided by the civil courts in which Government was concerned amounted during the year to 296, of which 198 were original cases and 98 appeals.

Of the original suits, 128 were decided in favour of Government and 38 against it, while 31 were compromised, and 1 transferred to the original side of the High Court. Of the appeals, 75 were decided in favour of Government and 16 against it, and 7 were remanded for re-trial. The total number of judgments favorable to Government was 203, against 54 unfavorable to it, the percentage of the former on the total number of the judgments given being 78·98. The percentage of favorable judgments in the preceding year 1871-72 was 85·6.

The total value of suits in which Government was concerned was Rs. 17,94,852; the value of those in which it was defendant being Rs. 14,36,578, and the value of those in which it was plaintiff being Rs. 3,58,274. In suits brought against Government, the aggregate value of the cases dismissed amounted to Rs. 5,11,089, and the aggregate value of the cases in which decrees were obtained amounted to Rs. 2,07,935; but the greater part of this sum, amounting to Rs. 1,55,381, represented the five cases of Radhapersad Sing of Shahabad which are

now in appeal before the High Court; so excluding the cases that are now under appeal, the actual amount of liabilities which Government incurred during the year was Rs. 44,513.

The value of the suits in which Government was plaintiff amounted to Rs. 3,58,273, and the aggregate value of the cases in which it obtained decrees amounted to Rs. 3,57,873; only one suit of the value of Rs. 400 was dismissed, and this is now under appeal.

The actual disbursements of Government during the year amounted to Rs. 58,102.

Court of Wards' cases.

The Court of Wards' cases conducted under Government agency were disposed of as follows:—

	Original cases.	Appeals.
Decided in favour of Court of Wards	371	39
Decided against Court of Wards	67	29
Remanded	0	5
Compromised	100	0

A revision of the establishment of Mofussil Small Cause Courts was undertaken during the year. In many places where the business was very light and easily disposed of by a peripatetic judge sitting only a few days in each month, large and expensive offices had been kept up in a very unnecessary way. It has now been arranged that where several courts are presided over by one judge, each court shall have one or two clerks attached to it permanently on salaries varying according to the responsibility involved, while the rest of the office establishment shall travel with the judge and dispose of the work at each place as its turn comes round.

CHAPTER IX.

REGISTRATION.

A very full account was given last year of the system of registration of documents in Bengal, and of the mode in which the Lieutenant-Governor hoped to develop this more widely by introducing rural sub-registrars and giving additional facilities for the presentation of deeds. The departmental reports show that during the year of review the system has again made further advances.

The number of registrations has risen from 245,270 to 279,080, the increase being nearly equally divided between optional and compulsory registration. The following table shows the figures for 1871-72 and 1872-73 in the principal classes of documents and sub-totals :—

		<i>Compulsory.</i>		1871-72.	1872-73.
		<i>Optional.</i>			
	Registration affecting immovable property.	Instruments of sale, &c., of immovable property of value of Rs. 100, and upwards		47,625	51,125
		Perpetual leases		47,181	54,920
		Other leases		62,222	64,944
		<i>Optional.</i>			
		Instruments of sale, &c., of immovable property under Rs. 100.		49,197	59,708
	Registrations other than those affecting immovable property.	Leases for one year or less... ..		1,111	1,470
		Miscellaneous documents		4,911	5,678
		Total compulsory registrations affecting immovable property ...		158,077	174,788
		Total optional registrations affecting immovable property ...		55,431	67,130
		Total registrations affecting immovable property... ..		213,508	241,918
		Obligations for payment of money.		21,672	24,909
		All other registrations		10,090	12,193
		Total of above		31,762	37,102
		Number of wills registered ...		934	1,209

The increase is well distributed over the principal districts, and does not apparently therefore depend upon abnormal local causes. Much of it is probably due to the introduction of the system of rural sub-registrars.

The process of sub-infeudation by grant of perpetual leases, which the Lieutenant-Governor noticed in last year's report, is still going on at an increased rate, being, as before, most common in some of the eastern districts. Chittagong with 11,852 such leases, Jessore with 10,932, Backergunge with 8,683, Furreedpore with 5,257, and Noakhally with 6,428, are far ahead of other districts in this respect, the nearest being the 24-Pergunnahs with 2,251, followed by Burdwan, Hooghly, and Nuddea, with 1,159, 1,075, and 1,380 respectively. None of the others come up to 1,000. The number of ordinary leases registered shows no particular increase, and it is quite as certain as before that agricultural leases are not as a rule registered in Bengal. The subject of Agricultural contracts and their incidents is a very large one, which calls for careful consideration on review of many connected facts.

The number of registrations of ordinary bonds and deeds not affecting immovable property still continues extremely small,—insignificant, it may be said, as compared to the country and population. Of a total of 24,969 money bonds registered, 1,324 were for sums over Rs. 1,000; 144 for sums between Rs. 500 and Rs. 1,000; 8,927 for sums between Rs. 100 and Rs. 500; 5,960 for sums between Rs. 50 and Rs. 100; 4,580 for sums between Rs. 25 and Rs. 50, and 2,734 for sums less than Rs. 25. The aggregate value of the bonds was Rs. 10,318,692, and the fees Rs. 22,871, or a little over 14 annas per bond on the average. Jessore, Nuddea, and the 24-Pergunnahs, have most transactions of this class; but in the Sonthal Pergunnahs more bonds for money are presented in proportion to other registrations than in any other district.

A suggestion has been repeatedly made that the registration of bonds should be made compulsory. The Lieutenant-Governor is quite ready to believe that at present the action of the Small Cause Courts, which deal with the majority of bond cases, is in many instances unsatisfactory, and that compulsory registration of bonds would mitigate this evil. But such a measure is impossible until registration offices are easily accessible in much greater numbers than at present. The Lieutenant-Governor trusts that the difficulty is being overcome.

Of 266,048 deeds paying an *ad valorem* fee, 176,008 fell short of Rs. 100 in value. The total value of the property transferred, however, during the year was Rs. 11,34,60,805.

The receipts of the department were Rs. 435,319, an increase over 1871-72 of Rs. 62,182. But the expenditure has also risen, and, in spite of reductions in establishments at sudder offices and in salaries, has increased by Rs. 23,821 to Rs. 304,782, exclusive of the cost of printing and stationery. The cause of this is the establishment of new offices, and the surrender to new rural registrars of a great portion of the fees received; but this will in time, it is hoped, be more than made up for by a general increase of the number of registrations.

The year closed with 167 registration offices at work, increased by ten since the year closed. Eleven Rural offices. new rural offices were opened during the year, and ten more since its close—making thirty-four such offices at places other than sub-divisional head-quarters. At seven sub-divisions also special officers have been appointed, but it is not intended, save under special circumstances, to relieve sub-divisional officers of their duties in this department. At twenty sudder stations of importance, special sub-registrars are entertained to relieve and assist the district officer, but during the year it has been determined to pay all future incumbents of these offices partly by salary and partly by commission instead of by a fixed salary, as hitherto. The number of officers is still by far too few, and the Lieutenant-Governor will not be satisfied till they are three or four times as numerous. So lately as 1864 no fewer than 450 Kazis' offices were abolished, and they should certainly be replaced by as many modern offices.

The system of rural sub-registrars has been judiciously, though very slowly, introduced, and efforts are being made to carry out the system more rapidly. Experimental arrangements are being made whereby, in cases where locality is not the essence of the contract, people shall have the option of going to that one of two or three offices in one division which is most convenient to them.

The inspection of rural offices has shown that they are on the whole quite as well managed as sub-divisional offices used to be, and there is already an increase in the registration work of the selected localities. The importance, however, of frequent inspection by district officers and special sub-registrars, as well as by the inspecting officers of the department, cannot be too strongly insisted on. The people must be made to see that these offices, opened for their convenience, are as safe and satisfactory as those at the head-quarter stations.

CHAPTER X.

MUNICIPAL ADMINISTRATION.

LAST year's report contained an account of the system of municipal taxation in Bengal, the varieties and shortcomings in the municipal administration, and the remedies which the Government had proposed to apply to these, as embodied in the Bill for regulating municipalities passed by the Bengal Legislative Council. The Governor-General, however, saw fit to refuse sanction to that measure, and, with the exception to be presently noticed, no change has been made during the year in the laws under which the various townships work, nor has the system of administration been materially altered.

It will be convenient at the outset to state briefly what the existing municipal Acts are, and how municipalities are constituted under each.

The Acts in force.

The oldest Act yet unrepealed is Act XXVI of 1850, which is however now in force only in one town, Jumalpoore, in the Monghyr district.

Act XXVI of 1850.

This Act enabled the Government to extend its provisions to any town or place, if satisfied that it was the general wish of the inhabitants to make better provision for making, repairing, cleaning, lighting or watching any public streets, roads, drains or tanks, or for the prevention of nuisances or for improving the place in any other manner, or for any one or more of the above objects. When the Act was put in force in any place, the Government appointed the Magistrate and some of the inhabitants to be Commissioners with power to frame rules for approval. The rules are to provide for raising the money necessary for the purposes of the Act, "*whether by house assessment or town duties or otherwise*;" for defining and punishing nuisances; and for regulating establishments, and such like. The Commissioners under this Act have much freedom of administration, being required only to report annually to Government the work done and the moneys received and spent by them under their rules. It will be seen that the form of taxation by "house assessment, town duties, or otherwise" is very wide and admits of almost any form of taxation, subject to the approval of Government. This is the only Bengal Act which admits of octroi or town duties.

Next to this comes Act XX of 1856, commonly called the Chowkidari Act, the main object of which is to provide for the watch and ward of the places to which it may be extended. It is in force now only in small towns or large villages or groups of villages, and under it almost everything is left in the hands of the Magistrate. A punchayet is appointed by him, whose duty it is to assess upon the inhabitants the sums which they must pay to meet the demand made upon the place; but their proceedings are subject to revision by the Magistrate, who also appoints the chowkidars, fixes their pay, and determines what additional sums are required for the payment of collection and other establishments, the provision of stationery and other necessaries. Any farther sum available may be devoted to the cleansing, lighting, or otherwise improving the town.

The tax to be levied in any place under this Act may be either "*an assessment according to the circumstances and property to be protected of the persons liable to the same,*" or a rate on houses and ground according to the annual value thereof. The Government determines in each case on the reports of the local officers which form of tax shall take effect. The maximum average rate under the first kind of tax is limited to 2 aunas per mensem from each householder; or, if a house-tax be preferred, to 5 per cent. on the annual value. The maximum leviable from any one householder is fixed at the monthly pay of a chowkidar of the lowest grade.

In 1864 Act III of the Bengal Council, or the District Municipal Improvement Act, was passed, and it was afterwards amended by Act VI of 1867. This Act III of 1864 introduced an elaborate system of municipal taxation, and vested the administration of the towns to which it might be extended in a body of Commissioners appointed by the local Government for that purpose. The Municipal Commissioners are selected from the inhabitants of the place, but are not to be less than seven in number. The Commissioner, the Magistrate, and the Executive Engineer and District Superintendent of Police, are additional *ex-officio* members, but there is no limit to the number of official members who may be nominated to the committee. The Magistrate is *ex-officio* Chairman. The Commissioners submit to Government annual estimates of expenditure, and furnish annual statements of receipts and outlay. The taxes levied are as follows:—

- (1) An annual rate not exceeding $7\frac{1}{2}$ per centum of their annual value on all houses, buildings, and lands,—to be paid by owners in quarterly instalments.
- (2) Tax on carriages, horses, and elephants according to a schedule attached to the Act.
- (3) Registration fee for carts, hackeries, and wheeled carriages without springs.
- (4) License fees on unwholesome trades.

Taxes (2) and (3) are only introduced by special notification of Government. Tax (4) is not directly provided for, but the licensing of such trades resting with the Commissioners, they have by their bye-laws imposed a fee in some cases. In one town (Patna) fees are levied for processions.

The Commissioners may, with the sanction of Government, raise loans for works of public utility. They frame bye-laws, subject to approval, and impose fines for breaches of conservancy rules. They pay in nearly all cases the whole cost of their police, besides attending to the conservancy and improvement of their respective towns. They generally receive from Government the proceeds of ferries, tolls, and pounds within their limits, on condition of their undertaking the management of these. Most of the places to which this Act has been extended are tolerably large towns.

In 1868 another Municipal Act was passed, viz. VI (B.O.) of

Act VI (B.C.) of 1868.

1868. Though it is not so expressed in the Act, it seems to have been designed principally for smaller towns, but there is no very uniform practice in this respect, some large towns being under Act VI of 1868, and one or two small ones under Act III of 1864. The main points in which this Act differs from Act III of 1864 are these:—

- (1) The town committee consists of a minimum number of five persons owning houses or lands, or trading or residing in or near the town, not more than one-third of the whole being allowed to be officials.
- (2) The appointments to the committee are ordinarily made by the Magistrate of the district, with sanction of the Commissioner; but the Act provides for their being made by such persons and in such manner as Government may direct. This is understood to have been intended to open a door for popular election, but if so, that method was not in any case adopted. The committees elect their own Chairman and Vice-Chairman, unless Government appoints the Magistrate to be Chairman *ex-officio*.
- (3) The tax is levied from *occupiers* instead of from *owners*, as provided in Act III, and is an assessment on an estimate of "*the circumstances and property to be protected of the persons liable to it*," the total sum to be raised in any one year being limited to an average of Rs. 2-4 on each holding, and the maximum leviable on one holding being Rs. 7 per mensem.
- (4) While the Municipal Commissioners under Act III of 1864 have large executive powers, those under Act VI of 1868 are in fact only a consultative body to assist the Magistrate by their advice, check expenditure, and frame assessments.

In connection with this subject of local taxation, Act VI (B.C.) of 1870 may be mentioned,

Act VI (B.C.) of 1870.

which was intended for purely rural villages. It had for its object the reform of the rural police. The law vests the management of the village or group of villages in a committee or punchayet to be selected by the Magistrate. These punchayets have the power of appointing watchmen and assessing all owners and occupiers of houses in order to provide for the payment of their salaries, over whom they are to exercise a general control. The assessment is to be made, as in Act VI of 1868,

according to the circumstances and the property to be protected of the persons liable to the tax, the maximum rate being fixed at one rupee per mensem. The law further provides that wherever the Act is extended, the lands hitherto appropriated to the maintenance of the village chowkidars shall be made over to the landholders on payment in perpetuity of half the present annual value. The Act, however, has been introduced experimentally in a few places only, and difficulties have been experienced in working it in some districts. The Lieutenant-Governor has not extended it in the western districts, where service lands prevail, because he objects to the expropriation of these lands.

When refusing sanction to the draft Municipal Bill, the Governor-

Municipal legislation during the year:
Act II (B.C.) of 1873.

General intimated his willingness to see an elective system tried, and to enable municipalities to spend money

voluntarily on education. Accordingly an Act has been recently passed by the Bengal Council (II of 1873,) which enables Government to provide for the election by the rate-payers and rotation of Municipal Commissioners in places under Act III (B.C.) of 1864, that is to say, in the larger towns. Such municipal bodies may also elect their own Vice-Chairman, and a power is given them of controlling by resolution in meeting the action of their Chairman or Vice-Chairman. An elective system was already possible in towns under Act VI of 1868, but as the functions of committees in those towns are simply consultative, it was not of much use to introduce the plan in such places. The Lieutenant-Governor preferred trying it under an Act which does give some real power to the town committee. Power has also been taken to enable both municipalities under Act III and towns working under Act VI of 1868, after providing for police, conservancy, and ordinary town purposes, to apply part of the funds at their disposal not only, as hitherto, to medical relief and vaccination, but also to the establishment and maintenance of schools, the only condition being that a clear majority of their members are in favour of this appropriation. Power is also given to spend money on the registration of births and deaths. This is but a small instalment of the reforms which the Lieutenant-Governor had hoped to introduce. It does, however, His Honor hopes, contain some germ of self-government, and it opens a door for the extension of education among our town populations. The Lieutenant-Governor has circulated to all bodies of Municipal Commissioners a notice that he is ready to permit the Vice-Chairman to be elected, and to grant the elective franchise to any municipality that applies for such concessions, and when the members have taken some interest in their own municipal affairs. He has intimated that the Government has no wish to force elective institutions on towns that do not desire the boon.

The Serampore Municipality has been the first to desire to try the system, and rules have been framed for giving effect to its wishes. The rules provide for a Board of eighteen Commissioners, of whom only three are to be nominated by Government, the rest being elected by the rate-payers. Every rate-payer has a vote. Any man of full age residing within municipal limits, or within three miles thereof, who is

himself a rate-payer and can read or write, and who has never been convicted of a non-bailable offence, may be a candidate. Each candidate has to get two rate-payers to nominate him. No rate-payer can vote for more than one person, or in more than one ward of the town.

Number of municipalities of each class. The number of municipalities of each class at work during the year was as follows :—

Under Act XXVI of 1850	...	...	...	1
Under Act XX of 1856	...	...	...	68
Under Act III of 1864	...	...	...	25
Under Act VI of 1868	...	...	...	91

The constitution of the town committees under the last two Acts is shown below :—

	Officials.	Non-officials.	Europeans.	Natives.
Act III of 1864	185	225	184	226
Act VI of 1868	230	618	164	684

Inquiries have been specially instituted this year with a view to ascertaining the extent to which Municipal Commissioners and town committees have busied themselves with, and effectually influenced, municipal work, and the degree in which the various Municipal Acts are successfully worked. The reports which have been received show that while a fair amount of work in carrying out assessments is obtained from the punchayets in chowkidari unions, their proceedings have to be carefully watched and periodically revised. After the duties of assessment imposed on them by law are over, few members of punchayets take an intelligent interest in the administration of the affairs of the village. But this is not perhaps much to be wondered at. The Act is in force principally in remote country towns of little importance; there is a difficulty in finding men of education for the post, to which, moreover, too little dignity is attached to render any of the better class of natives desirous of holding it. Practically, everything is left by the law in the Magistrate's hands, and there is little inducement to an outsider to show any public spirit; while, on the other hand, the Magistrate is unable to stir up much local enthusiasm in villages to which he can but seldom give personally much attention. In a few cantonments where the Act is retained, sanitary matters are under the control of the cantonment authorities, and very fair results are obtained. Perhaps had the ordinary punchayets more real power, they would take more interest in their affairs.

Turning to committees under the District Towns and Municipal Acts, opinions vary much as to their utility, but the variation has perhaps some reference to the part of the country whence the reports come. In the Chittagong and Orissa divisions for instance, where society is generally in a backward state, they are pronounced a failure.

owing to the apathy and indifference to their duties displayed by the members of the committees. On the other hand, near the Presidency and in the Patna division, where there are a large number of natives accustomed to European ways, and where either English education has made some progress, as it has near Calcutta, or the people are more easily led by their district officers, as is the case in Behar, it may be said that the generality of municipalities have worked tolerably well. The fact that the initiative rests in most cases with the Magistrates, and that there is an absence of obstructiveness in the councils of the committees, hardly justifies us in styling the municipal system a sham. There is an acknowledged difficulty in certain towns in getting together a quorum; but, on the other hand, in the larger towns, especially those under Act III of 1864, there are many public-spirited and enlightened citizens who take an intelligent and active interest in the affairs of their town, and it has been observed this is especially so where a sense of responsibility and a spirit of emulation have been evoked by entrusting the care of a specific part of the town to individual members of the committee. The majority of the native gentlemen prefer, no doubt, sharing in the deliberations of the committee to taking an active part in executive work. It is found, however, that a great deal can be done by tact and judicious management on the part of the Magistrate. Habits of indolence it may not be possible to overcome, but much may be done in the way of encouraging independent thought and action, and in overcoming the habit of looking to the Government to do everything.

The municipalities in which the most active and efficient interest has been taken by the committees in the affairs of the town, are the Suburbs of Calcutta, Kishnagurh, Santipore, Patna, Mozufferpore, and Ooterpara. In Dacca, too, the Commissioners are said to have been very useful, and even in Gowhatty there are two native gentlemen said to deserve special praise.

While stating that in the smaller townships under Act VI a less active and intelligent interest is taken by members of the committee than is usual in municipalities under Act III of 1864, it is necessary to bring prominently into view the fact that the former places are generally much smaller than the latter; that they are further away from the centres of civilization; that the duties of the members of the town committees being chiefly consultative and their powers much more limited, there is not the same incentive to make them take an active part in the management of affairs. Besides, the income of many of these places is so small that, after paying the police and the necessary establishment for the collection of the tax, there is but little left to apply to other purposes or to consult about. Where the towns are at or near district or sub-divisional head-quarters, the committees have, as a rule, been found to take an interest in their affairs. No very remarkable energy is displayed in enforcing sanitary rules, but on this point it must be held in mind that country towns have not and cannot afford the same large conservancy establishment as metropolitan cities, and that it is chiefly paid overseers who are instrumental in bringing offenders to justice in the case of the latter.

The best method to guard against the apathy and indifference which are attributed to town committees, in some cases with too much justice, is, it has been more than once observed, to render the position of the members more independent and dignified, and to bring home to them a due sense of responsibility. Some steps have been taken in this direction; the members of many committees having been vested with powers to sit as a bench and dispose of conservancy and other petty cases. Provision has also been made by the law lately passed, and above described, for the introduction of the elective system; and in municipalities the power of the Chairman has been curtailed by the same Act, which prohibits him from acting contrary to the express orders of the committee at a meeting.

In considering next how far the work of municipalities has been efficient and successful, it may be noted that the expenditure incurred by the municipalities of the several classes, Calcutta excepted, during the year amounted to Rs. 17,876,044. Classed under the various heads of account it was as follows:—

	Act III (B C) of 1864		Municipalities under			
	Suburbs of Calcutta and Howrah	Municipalities of the interior	Act VI of 1868 (B C)	Act XX of 1856	Act XXVI of 1850	Total
Establishment	66,070	85,534	57 448	15,379	5,075	2,29,506
Police	1,31,241	1,77,676	2,00,801	66 797	2,708	5,79,218
Conservancy	81,891	81,373	48,525	9,108	250	2,21,148
Roads	1,22,636	1,82,822	1,17 964	15,484	1,323	4,40,228
Buildings		38,916	4,763	7,944	94	51,737
Works of public utility	94,240	89,774	11,118	8,396	4,539	2,08,067
Miscellaneous and contingent	23,923	26 676	6,447	990		57,136
Total	5,19,101	6,82,791	4,47,968	1,24,083	13,963	17,87,084

So large a portion of the income of every town is devoted to the maintenance of the town police, the strength of which is determined irrespective of the committees, for the cost of necessary establishment, for the collection of the tax, and for the repair of existing roads and buildings, the maintenance of which is hardly a matter of choice, that there is little scope left for indulgence in extended schemes for the improvement of the towns. It is too often the case that the most crying necessities of towns in these provinces is a proper drainage system, or a pure water-supply; but any project which might be formed for the purpose would, of necessity, far exceed the means at the disposal of the committees. None of these have as yet given countenance to schemes beyond their means. In a few cases, a small grant has been made by Government to aid in local improvements of the kind, as in the case of Dacca, for conservancy purposes, and of Silchar for the drainage of the town. In one or two instances private munificence has come into aid, as in the case of the generous

donations by Khaja Abdool Gunny, c.s.i., and by his son, to the city of Dacca, where through their generosity a scheme of water-works has been commenced which will be an enormous benefit to a city which has hitherto suffered much from cholera and other endemics.

The town of Burdwan has also borrowed Rs. 40,000 from Government to supply itself with pure water, and a most successful commencement has been made by opening a canal from the Damoodah; while Howrah, which is practically a suburb of Calcutta, has arranged to raise large sums for drainage, and has submitted to extra taxation for lighting the town with gas.

As yet, however, these municipalities have borrowed very little.

There is a very general concurrence of opinion that, within the means at the disposal of the committees, the funds in their hands are on the whole well laid out. It is, indeed, sometimes said that for one work of public utility carried out with the aid of the committees, there are twenty carried out in spite of them by the Magistrate. This may be true of certain places; it is not generally so. There is daily evidence of the fact that there are native gentlemen on some committees who do take an intelligent interest in their work, and give advice and assistance of the most marked kind. Slow though improvement in the various towns may be, owing to a deficiency of means, it is certain that considerable advances have been made under the present system, and in some cases marked improvements. The towns which have succeeded best are those where the meetings of the committees have been most regular, and where a proper distribution of executive work has been effected.

Some saving might be expected were a substantial voice in regard to the outlay for municipal police vested in the committees, as there is a general feeling among them that the present police are more costly than is necessary, and not more efficient than the old chowkidars who were paid much less. There is, accordingly, considerable jealousy regarding the expenditure on this head, and there is little doubt that were savings effected, more liberal allowances would be willingly accorded to primary schools and the charitable institutions of the town.

In the case of large towns there is some complaint regarding the inadequate expenditure on sanitary measures. These matters are, however, receiving increased attention. It must be also remembered that in some cases a fixed establishment is kept up, which is applied indifferently for sanitary purposes, or for the repair of roads, &c., as occasion may require, so that the precise amount of expenditure on sanitary objects is not fully represented in the tables.

Uncongenial as the employment is to the native mind, the assessments are almost exclusively in the hands of the native members of committees, and are, on the whole, fairly made. Some supervision is undoubtedly

INCOME.

The assessments fairly made.

required to prevent undue inequalities in the taxation, and cases do occur where the work is made over to untrustworthy hands; but considering the invidious nature of the employment, and the difficulty of the task, some credit is due to the committees for the way this work is done, and no advantage is to be looked for from a change in the system.

The receipts of the various classes of municipalities during the past year, classed under the various heads, was as follows :—

	Act III of 1864.		Act VI of 1868 (B.C.)	Act XX of 1856.	Act XXVI of 1850.	Total.
	Suburbs of Calcutta and Howrah.	Interior.				
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Rate upon owners according to the yearly value of houses and lands owned in the town ...	3,48,866	3,80,648	.....	.....	.....	7,29,509
Tax upon occupiers of holdiugs within the town according to their circumstances, and the property to be protected ...	.....	.....	4,00,106	1,19,225	17,128	5,36,458
Tax on carriages, carts, horses, and elephants ...	38,087	33,099	...	308	527	73,821
Fines and fees ...	75,652	13,785	2,557	118	105	92,217
Pounds, ferries and tolls within the town limits ...	15,783	1,07,320	6,510	2,664	...	1,32,277
Rent of houses and gardens and municipal markets ...	4,458	29,636	5,409	.....	.....	38,663
Other sources, including grants from provincial funds ...	10,497	1,15,676	32,871	7,876	830	1,67,550
TOTAL	4,94,243	6,81,059	4,46,412	1,30,191	18,585	17,70,490

It will be seen that of the total receipts of towns under Act III of 1864, Rs. 4,94,243 is the income of the suburbs of Calcutta including Howrah, and Rs. 6,81,059 that of all other towns under the Act. Excluding Calcutta and the suburbs, the total municipal receipts were Rs. 12,76,247, of which Rs. 9,51,930 were derived from taxation and Rs. 3,24,317 from other sources, including loans and grants.

In the Punjab no less than four-fifths of the municipal income is derived from octroi or town duties. In the North-West Provinces also these yield an abundant and elastic revenue. In Bengal the only taxes of any moment are either a house-rate, or what is practically a local property and income-tax.

There is a very general feeling that in all but metropolitan towns a rate on houses, if strictly assessed, becomes oppressive, as there are many families who have seen better days who continue to occupy houses built by their progenitors, which the custom of the country would forbid them to abandon, while a tax assessed according to strict value would far exceed their means. On the other hand, the poorness of the house occupied is by no means a sure indication of the poverty of the owner, for many of the wealthiest classes prefer investing or amassing their money to spending it in providing suitable habitations for themselves. An old brick house, large, rambling and uncomfortable, has a certain apparent value, while a comfortable erection of bamboos and thatch very suitable for the climate has little value. Except in towns to a considerable extent Europeanized, it is not the custom in these provinces for the majority of the community to pay rent for houses as people generally live in their

own houses, and any valuation that can be made must be conjectural. It is generally admitted that, in making the valuation, some advantage is had by the assessors of a house-rate to the means of the owner. Though fancy rents may often be assumed, the principle of calculating a rate on the rental is, however, fairly adhered to in large towns, where masonry buildings are plentiful; and for such places as the suburbs of Calcutta a rate on houses may be appropriate. In other places, such as Comillah, where the majority of houses are mere mat huts, almost valueless as regards rental, it is as clearly out of place. Were it not that the system has in such places been irregularly departed from, it would be hopeless for the municipalities to meet their liabilities. The Commissioners in such places, while keeping up the fiction of a house-rate, have practically adapted taxation to the circumstances of the parties assessed. This rough sort of equitable assessment is, it is said, really preferred by the people. Nine out of ten of the petitions for abatement preferred against the house-rates assume that the tax should be assessed on the income of the rate-payer, and where, as in the town of Chittagong, a pure assessment on rental is somewhat rigidly adhered to, the system is decidedly unpopular, for the poor man pays almost as much as the rich. On the other hand, the certainty with which a rate on the rental of a house can be ascertained makes this mode of taxation popular with a limited class, especially near Calcutta, where men of means are more alive to their legal position. The tax falls here, however, somewhat severely on the poor; and, generally in the Presidency division, it is said that it is only the indulgence which is shown to rate-payers with slender means which causes it to work at all. This is also stated in less decided terms of several other divisions.

Under the Chowkidari Act it is optional to adopt either a rate on the value of houses, or a tax on the circumstances and property to be protected of the rate-payer. The singular unanimity with which the latter system has been adopted in almost every union in these provinces sufficiently attests the weight of the considerations which render a tax on houses undesirable, at least in towns in the interior, where men of substance generally live in thatched sheds. Indeed, only two cases are reported, and that in cantonments in the Presidency division, where a rate on houses has been adopted.

The assessments made on the circumstances and property to be protected of inhabitants in towns under Act VI of 1868, and under the Chowkidari Act, have, as above remarked, generally been made with an approach to equity. There was one case where corruption was detected on the part of a Ward Committee, and the proceedings of some punchayets are open to suspicion, but this is inevitable, and on the whole it would seem that there is not much reason to be dissatisfied with the system. It is hopeless to expect popularity with regard to any system of direct taxation, but there is an acquiescence on the part of the people in the assessments made by committees which could not be expected were there anything which should render them specially unpopular. With regard to the assessments of punchayets, where reason for complaint exists, there is no want of readiness in appealing to the Magistrate.

The wheel-tax exists in the towns marginally noted. In certain of these taxes are also imposed on horses, elephants, &c., and registration fees taken for carts.

Suburbs of Calcutta.	Ooterpara.
Howrah.	Monghyr.
Hooghly.	Bhaugulpore.
Midnapore.	Purneah.
Serampore.	Jumalpoore.
Burdwan.	Patna.

These taxes are generally said not to provoke any real discontent beyond that inevitably caused by any system of direct taxation. Indeed, with reference to Serampore, Ooterpara and Hooghly, it is said that these taxes, as being in some sort a sumptuary tax on the well-to-do classes, are not unpopular. A tax on expenditure is preferred to a tax on income.

The want of funds is now a considerable difficulty in many municipalities. Many towns have now a great difficulty in keeping up, even in an ordinary state of repair, already existing roads. Formerly it was the practice to devote a large share of the funds available for district roads to maintain roads in the chief stations and towns. Under the Road Cess Act, the municipalities being excluded from the taxation under that Act, it is not legal to spend any part of the district road funds within municipal limits. It was the intention that under the new municipal rules, the municipalities should be bound to maintain the roads within their own limits. Although this compulsory provision has not become law, roads in municipalities must either be made at the expense of the municipalities, or not made at all, and thus has fallen on them a burden which it is fair that they should bear, but which they have not hitherto borne. There are again few towns in which it has been found possible, with the funds at the disposal of committees, to introduce anything like a proper system of sanitation. This is especially the case with towns under Act VI of 1868. Some officers think that some of the supplementary taxes allowed by Act III of 1864 might with advantage be introduced into these. It seems probable that eventually either some such measure will have to be adopted, or recourse had to indirect taxation as in the Punjab and North-Western Provinces.

The constitution of the Calcutta Municipality, as described at page 100 of last report, has remained unchanged. In February 1872 the Chairman, Mr. Stuart Hogg, went to England on furlough, and was succeeded for a time by Lord Ulick Browne, who held office up to the close of 1872, when he was succeeded by Mr. H. Cockerell.

There was, if anything, more friction than usual in the relations between the Chairman and the Justices during the year 1872. Municipal business was pushed through in some way or other, but the annual report has been forwarded to Government with a resolution of the Justices in meeting, setting forth that it was drawn up by their late Officiating Chairman, and that it is in several points not accepted by the majority of the Justices. The points of difference are not explained, and Government can only take for the purposes of this review the information laid before it.

The income of Calcutta is principally derived from rates on houses. There is a general rate and separate rates for lighting, police, and water, the total amounting in the past year to 17½ per cent. A

considerable income was also derived from license on trades and professions, carriages, horses, and carts, and there was some income from fees for services of various kinds. Considerable sums, amounting to nearly 11 lakhs of rupees, were borrowed during the year, and are entered in extraordinary receipts. Further details regarding the revenues of the municipality will be found in the chapter on provincial and local finance under the head "municipal revenues."

The total amount at the disposal of the Justices for the year under review is thus stated :—

	Rs.	A.	P.
Ordinary income	33,06,102	10	7
Extraordinary income	11,77,865	11	6
Cash balances	5,90,019	13	1
Grand Total	50,72,986	3	2

Of the ordinary income between six and seven lakhs is a mere double entry in account. The real income is between 26 and 27 lakhs. There is a similar double entry in expenditure on account of workshops, stores, &c.

The ordinary expenditure of the year is stated as follows:—

	Rs.	A.	P.
Interest on Municipal Debenture Loans and Water-supply Loan from Government, including Sinking Fund	8,43,766	0	0
General establishment, office rent, commission, printing, advertising, law, and contingent charges	3,06,297	7	6
Roads	2,76,084	3	5
Conservancy	1,70,802	6	1
Lighting of the town, including Hastings	2,30,686	5	10
Police	2,47,004	4	6
Water-supply	2,51,643	3	2
Watering streets	39,081	11	4
Hospital and vaccination	45,684	9	1
Town Hall	10,718	4	3
New drainage; working Pumping Station, &c.,	53,867	8	7
Working and maintenance of Municipal Railway	27,261	2	0
Public squares	4,632	10	6
Working slaughter-houses	12,198	9	11
Tramway	93,123	6	3
Census of the town	18,651	16	9
Jute Ware-house and Fire-Brigade charges	30,012	12	11
Hastings Fund charges	3,711	13	4
Miscellaneous; Suburban Municipality, share of Hackney-tax; Income-tax, interest on contractors' deposits, &c., &c.,	21,477	4	10
Kotrung and Entally Workshops, general stores, stone ballast, sundry materials, &c.	7,21,810	15	7
Sundry advances	12,499	6	9
Total	34,18,846	1	7

The extraordinary expenditure comprised :—

	Rs.	A.	P.
Expenditure on account of Municipal Market	2,38,078	3	6
Ditto on ditto Municipal Office	45,743	9	3
Ditto on ditto Supplementary Water-supply Scheme	69,643	15	10
Burn and Co., for drainage works	78,146	9	8
Expenditure on drainage works done by Department	3,76,187	3	10
Advance for land at Ballakannah for new road	1,00,000	0	0
Ditto for Akra brick	14,000	0	0
Refund of amount due to General Fund in 1871 Income-tax, private drainage, &c., &c.	25,437	4	9
Total	9,47,239	14	9

	Rs.	A.	P.
This brings up the aggregate ordinary and extraordinary expenditure to	43,61,086	0	4

Deducting the total expenditure from the total income, there remained				at close of the year under review a balance of Rs. 7,11,902-2-10 at the disposal of the Justices, as shown in the margin.
Total income	...	Rs.	50,72,988 3 2	
„ expenditure	„		43,61,086 0 4	
		Rs.	7,11,902 2 10	

Last year's report noticed the position of the Justices' loan account up to date, the extension of their borrowing powers to 85 lakhs by Act I (B.C.) of 1872, the establishment of a reserve or sinking fund, and the fact that the Justices had already borrowed or arranged for loans nearly up to the extreme limit of these extended powers. No further change has taken place in these respects, but work has been steadily pushed on in connection with the drainage, water-supply, and other schemes, on account of which the money was borrowed.

Up to the close of the year 1872 six lakhs had been drawn of the 21 lakhs sanctioned as a loan for the drainage extension, and Rs. 2,70,000 from the Rs. 4,10,000 sanctioned for the water-supply. The sinking fund for general loans amounted on 1st January 1873 to Rs. 3,99,700 in Government 4 per cent. paper, and Rs. 1,44,097 in cash. Rs. 4,05,000 in $5\frac{1}{2}$ per cents were in the Comptroller-General's hands on account of the sinking fund towards the refund of the water-supply loan, and a cash balance of Rs. 52,803.

Since the close of 1872 the following sums have been drawn by the Justices of the loans already sanctioned:—

	Rs.
For Drainage	8,00,000
„ Water-supply	1,40,000
„ Municipal Offices	1,30,000
Total	10,70,000

Their total liabilities to date are as follow:—

A.—Due to the Secretary of State at date of passing of Act I (B.C.) of 1872—		Rs.	Rs.
(1)	Water-works loan	52,00,000	
(2)	Market loan	3,00,000	
			55,00,000
B.—Borrowed from the public on debenture		....	55,00,000
C.—Taken from the Secretary of State on account of loans sanctioned since passing of Act I (B.C.) of 1872—			
(1)	Water-works extension loan	4,10,000	
(2)	Drainage extension loan	14,00,000	
(3)	Market loan	2,30,000	
(4)	Municipal office's loan	1,30,000	
			21,70,000
Total liabilities up to close of 1873		...	1,31,70,000

The legal limits of the Justices' borrowing power (outside the 55 lakhs under heading A above) was, as already noticed, fixed by the Act above quoted at 85 lakhs. They may, therefore, still borrow Rs. 8,30,000. Rs. 7,90,242 of this are, however, already arranged for, being the balance of the drainage extension and market loans, so that the Justices have borrowed or arranged to borrow to within Rs. 39,758 of their maximum limit.

Last year's report stated that it had been arranged to carry out the main drainage of the northern part of the Town, and the sums borrowed have been devoted to pushing on this very important work, which may now be said to be about two-thirds completed. Only the first and second class sewers are being made, as the cost of arterial and house-drainage over such a large area is at present beyond the means of the Justices. But in a selected area round the Medical College Hospital a thorough system of drainage has been carried out; Government paying half the cost with a view to effecting, if possible, some improvement in the sanitary state of that great institution, and testing by experiment the effect of complete drainage on a very bad part of the native town.

The water-supply during last rains was by no means satisfactory, being insufficient in quantity and bad in quality. The scheme of providing for street-watering by laying down pipes from the river at Chandpal Ghât, and so increasing the quantity of drinking water available for the growing demands of the Town, was noticed last year, but has not yet come into operation, though a good deal has been done towards the completion of the necessary works by laying down pipes and commencing the erection of the pumping engines. The filtering beds at Pultah were found to act very unsatisfactorily during a great part of the rains. The river water being then charged with silt, did not pass through the filters readily, and it became necessary to rake up the beds frequently to get the requisite supply through them—an operation which of course did not improve the appearance of the water. Some change in the filtering arrangements will probably be necessary.

In fact, it is probable that a heavy additional expenditure in connection with the water-supply will be necessary, and the subject is one of much difficulty.

The building of the municipal market was greatly delayed by the discovery of an error in its construction. It was found that the solid arched roofs which have answered so well in other municipal buildings were not safe when resting on iron pillars, as arranged in the plans for the market. It has been necessary therefore to replace the outer iron pillars by masonry. Recently, however, the work has gone on more rapidly, and the southern block is advertised to be opened on the 1st January.

The municipal offices are fast approaching completion, and will form a handsome addition to the part of the town in which they are situated.

The reclamation of the Salt Water Lake, into which all the sewage and sweepings of Calcutta are discharged, has been a matter of some

anxiety and difficulty. Various experiments have been made in sewage cultivation with more or less success; but it appeared that the officers of the municipality have enough to do in town, and were unable to take the thing in hand with any prospect of success. It is understood that the municipality now propose to let their rights at an annual rental of Rs. 15,000, including the right to the carcase platform, and the dead bodies of animals brought there, but this matter has not come before Government.

A tramway from Sealdah Railway Station to Dalhousie Square was opened in February, but at present it does not seem to be remunerative, and the Justices are contemplating selling it into private hands. This also has not come under the consideration of Government.

The Jute Ware-house Act (II of 1872), designed to bring the store-houses and screws under inspection to prevent fires and protect the town, was introduced and vigorously worked. Under the same Act an efficient fire-brigade was organised which, having its head-quarters at the Police Office in Calcutta, attends fires either in town or in any part of the surrounding suburbs.

The census of the town was, it is feared, to a great extent a failure; but this matter has been dealt with in the census chapter of the general report.

The above information has been given in general terms, for in fact the Government is very insufficiently informed as to the proceedings of the Calcutta Municipality, and does not exercise much control or supervision over them. In the last

Reform called for in the present municipal system of Calcutta.

report the opinion of the Lieutenant-Governor was expressed, that the constitution of the municipality required reform. During the present year 1873 there has been less friction between the Chairman and the Justices than in 1872, but the relations with the Government have certainly not been improved; on the contrary, some of the Justices have more than ever taken a line adverse to the Government in regard to several small things in which the Government was necessarily concerned, and the Lieutenant-Governor feels that the Government has not exercised all the influence which it is right that it should exercise as regards the affairs of this great metropolis. In truth, peace between the Chairman and the active members of the Justices has been secured by too great concession to the pretensions of the latter, and the Government has felt that it could not interfere much, without creating collision and difficulty, till it was prepared to undertake a revision of the municipal constitution. The task of giving a fit constitution to a city so very peculiarly situated as Calcutta is one of extreme difficulty; the Lieutenant-Governor has been unsuccessful in his attempt to settle the municipal arrangements of the interior; he has thought it well to watch the reforms lately made in Bombay; recently the anxiety occasioned by failure of the crops has made it impossible to undertake an additional labor; and so altogether it has happened that the task of reforming the Calcutta Municipality has not been attempted. Meantime, in the main, things have not gone very wrong, the improvements commenced by Mr. Hogg,

and the system of management which he introduced having been so far carried out, in spite of some friction in the working of the machine. The loans already sanctioned for great public objects have been on the whole fairly utilised. But these funds are now nearly exhausted; it seems likely that, to carry to completion the improvements which have been undertaken, and to give full effect to them, it will be necessary in some way to raise a good deal more money,—in fact, large sums of money. As observed in last report, the Lieutenant-Governor feels that great questions and great amounts must be dealt with, in respect of which it is necessary that there should be an efficient and responsible power competent to decide, and that the Government should have a sufficient controlling voice. The main practical drawback to the present municipal system is that, while the Justices are not responsible to any constituency (being the mere nominees of the Government and yet not responsible to Government, since no term of office is prescribed), things are so arranged that in practice the main body of the Justices have no sufficient voice, and the affairs of the municipality are almost monopolised by a small number of gentlemen who are good enough to render much service, a great part of which is no doubt useful, but who are not alone a body sufficient to dispose of weighty questions affecting both this and future generations without the control of the responsible Chairman and of the Government. Most of the able and influential men whose names appear on the list of Justices are busy business-men; they cannot afford to give very much time to the affairs of the municipality. The business is done either at meetings which are public meetings and where reporters encourage long speeches, or in committees which require much time. It is found that no man can take much part in the proceedings who cannot devote a very large portion of his time, and listen for hours to speeches before he gives a vote; and the result is that most of those whose assistance would be most valuable are deterred and take little or no part, while the business rests, as has been said, with a very limited number of gentlemen. If the salaried and responsible Chairman exercises a sufficient influence over them, the system may work well; but if he ceases to do so, sooner or later a reform will become inevitable.

CHAPTER XI.

MARINE.

THE number of vessels belonging to the Bengal Marine during the year 1872-73 was—
 Vessels of the Bengal Marine.

Sea-going steamers	2
Steamer unsafe to go to sea	1
Sea-going brigs and other vessels	1
Hulks... ..	1
Pilot brigs, survey vessels, light ships, buoy vessels, reserve pilot vessels, boats, &c....	87
River-going steamers	8
Ditto flats	5

The value of work done by the vessels of the Bengal Marine during the year was estimated by the Marine authorities at Rs. 7,94,642, while the maintenance of the vessels cost Rs. 9,61,460; but the statement of the earnings is for the most part fictitious. A sea-going steamer for this Government is still the most urgent want of the Marine Department, and its necessity has repeatedly been urged upon the consideration of the Government of India.

The steamer *Agitator* was, towards the end of the year, transferred to the Overland Transport Department for use in the Suez Canal. The steamer *Nemesis* was attached to British Burmah. The *Undaunted* was stationed at Port Blair, her place in the river being supplied by the *Celerity*, which is a very unseaworthy craft; so that we have not at Calcutta or in Bengal a single Government steamer of any kind fit to go to sea. No change has taken place in the survey and pilot and light vessels, but several of them are old, and must soon be replaced by new ones. This is more especially the case with the surveying brigs. The condition of this department has led to complaints by the Chamber of Commerce regarding the want of proper means of recording with sufficient rapidity the changes which take place in the channels of the Hooghly. The subject had already been noticed by Admiral Mends, and the Government of Bengal has urged on the Government of India the necessity for carrying out his proposals to substitute steam vessels with improved appliances for the present sailing vessels of the Survey Department.

Several important points regarding the working of the Shipping Acts have come under the consideration of the Government. The Lieutenant-Governor has urged upon the Government of India the necessity of

making legal provision to prevent vessels loaded to a dangerous extent leaving the port of Calcutta. Proposals for revising the diet scales for native seamen, both on board home trade and foreign-going ships, for determining the average length of voyages to the several ports which trade with Calcutta, and for proportioning the quantity of provisions to the length of the voyage, have also been submitted to that Government. An inquiry into a case of excessive mortality on board a pilgrim ship drew the attention of the Government to the want of anti-scorbutic elements in the food supplied to the pilgrims, and an examination of the law bearing on the subject led to the conclusion that the local Government could not prescribe anti-scorbutics for native passengers. The question of altering Section 100 of Act I of 1859, so as to allow inquiries held under that section to be preliminary only to an investigation by a tribunal at a Presidency town, has also received attention, and measures have been adopted to regulate the traffic by passenger boats plying between the several ports of the Chittagong division and Arracan.

One or two cases have also occurred in which emigrant or pilgrim ships have had to put back in an unseaworthy state. Into each of these cases special and searching inquiry was made, and general orders have been issued calling attention to the necessity for the utmost care and strictness in surveying all vessels to be used by pilgrims or emigrants. The Calcutta Marine Department claim that as yet no single emigrant vessel certified by them has ever been lost except one, and she ran on shore at the mouth of the Mutlah.

For some years past there has been discussion and some complaint about the position and prospects of the Hooghly pilots. In 1867 a

Hooghly Pilot questions.

Committee sat and reported upon the matter, but nothing was actually done. In July 1872 the matter was again taken up, and with it the kindred question of introducing an equilibrium between the income and expenditure of the Calcutta Port approaches. There were then 119 pilots on the Hooghly, of whom 76 belonged to the old Government pilot service, and 43 were licensed pilots. The Marine authorities, Calcutta merchants, and the pilots themselves, had represented that there were too many pilots on the river. The senior pilots got plenty of work and practice, and earned a large income, while the juniors got no practice on the river, and barely earned enough to support themselves. Acting under the advice of a Committee in which the Chamber of Commerce and the pilots themselves were represented, the Lieutenant-Governor decided that the total number of Hooghly pilots ought to be reduced to 70. He proposed to reduce the numbers by offering bonuses to those who would retire, by weeding out the pilots who were inefficient or ill-conducted, and by compelling the retirement on a bonus of a few of the junior men. To these proposals the Government of India has now agreed, and has sanctioned the offer of bonuses or extra pensions amounting in all to a capital value of £23,000. When these orders shall have taken effect, and certain alterations and adjustments shall have been made in the grades of pilots, it is hoped that the Hooghly pilots will all of them get sufficient practice and make a decent income. In settling the details the Government has the advice of a Committee consisting

of the Collector of Customs, who has eleven years' experience of the Port; of the President of the Chamber of Commerce; of the Officiating Master-Attendant, who has served for thirty years in the Bengal Marine; and of two selected pilots.

When the numbers of the pilots shall have been reduced, the Lieutenant-Governor hopes, by reducing the Port expenditure and by redistributing the Port dues and pilotage fees, to effect an equilibrium between the income and expenditure of the Port of Calcutta outside the limits entrusted to the care of the Port Commissioners. The following extract from a Resolution recorded by the Lieutenant-Governor on the subject in February 1873 shows how the balance of income and expenditure has hitherto stood, and what is the remedy which the Lieutenant-Governor proposes to make. The Resolution said: "If under arrangements which are now to be made the average earnings of each pilot are equal to Rs. 500 or Rs. 600 a month, and if the earnings and work falling to the several grades of pilots are more equally divided, the Government may fairly redistribute the Port dues so as to secure an equilibrium of the Calcutta Port finances.

	Pilot service.	Approaches to the Port.	Total.
RECEIPTS.	Rs.	Rs.	Rs.
1867-68	7,45,095	2,61,657	10,06,752
1868-69	8,19,686	2,52,117	10,71,803
1869-70	7,24,156	1,86,455	9,10,611
1870-71	8,42,287	2,06,351	10,48,638
EXPENDITURE.			
1867-68	9,14,062	5,37,969	14,52,031
1868-69	9,88,200	5,28,561	15,17,761
1869-70	8,72,834	4,86,777	13,59,611
1870-71	8,57,855	4,94,241	13,52,096
DEFICIT.			
1867-68	1,68,967	2,76,312	4,45,279
1868-69	1,68,514	2,77,444	4,45,958
1869-70	1,48,078	3,00,322	4,48,000
1870-71	15,568	2,87,890	3,03,458

two communications from the Financial Department, and is adverted to in the second report from the Pilot-Committee. The Financial Department papers of January 1872 state that the 'annual expenses to the State on account of this branch of revenue amount to £135,210 (for 1870-71), and the receipts to £104,864, leaving a net charge of £30,346, which represents the annual cost (exclusive of pensions to pilots and absentee allowances in England) to which the Exchequer is being now put on account of the trade of Calcutta and the provinces with which it has dealings.'

"The Pilot Committee show that the Port finances had in 1871-72 so far improved, that the net deficit had been reduced to Rs. 1,02,000; but it is not absolutely certain that the deficit will under present arrangements remain so much below the average of former years. The only way to secure an equilibrium between receipts and expenditure is either to raise the income of the Port, or to reduce its expenditure. The Calcutta Port dues are already high, and the Lieutenant-Governor would not willingly propose to raise them further. He considers, however, that the dues may be fairly and reasonably redistributed between the pilotage and the rest of the Port charges, inasmuch as the deficit on the pilotage has been always so much smaller than the deficit on the rest of the Port accounts. The pilotage charges of the Hooghly are at present, according to paragraph 69 of

the Committee's report, about $6\frac{1}{4}$ annas per register tonnage; while the income of the Calcutta Port over and above pilotage is raised by a fee of four annas per ton on all vessels entering the River Hooghly.

"With a view to making the relation between income and expenditure more equable under both heads of the Calcutta Port approaches, the Lieutenant-Governor would redistribute the pilotage dues and Port dues so as to make the pilotage dues fall at the rate of about $5\frac{1}{4}$ annas per register ton, and so as to raise the share of the Port dues pertaining to the Port approaches to about 8 annas per ton. The pilotage dues are paid by vessels both up and down; the Port dues are paid only once, on entering the harbour. For every anna per ton taken off the pilotage dues, two annas can be added to the Port dues without imposing any additional burden on trade. Under such a redistribution the average earnings of each of fifty-six running pilots would be about—

	Rs.
Pay and allowances as before, about	13,000
$\frac{1}{4}$ of the former earnings of the free and licensed pilots, $\frac{1}{4} \times$ Rs. 4,77,415 ...	4,03,966
Grand Total ...	4,17,000
Divided by 56 running pilots = Rs. 7,446 a year per running pilot.	

"But a redistribution such as has been indicated in the foregoing paragraphs would not of itself suffice to secure equilibrium: some reduction of expenditure is also necessary. Admiral Meuds' report showed clearly that one pilot vessel at least might be spared; the Financial Department papers also urge that one pilot brig be reduced, and there seems no doubt that such reduction can be carried out as soon as the numbers of the pilot service are reduced. While the pilots are over-numerous, the pilot vessels would be too crowded if one of the pilot brigs were reduced. The eventual reduction of one pilot brig will secure an annual saving of about Rs. 20,000."

The Resolution went on to express a belief that "if all the proposed reductions and savings could be carried out, and if all other circumstances are as favorable as during the year 1871-72, an equilibrium between the receipts and the expenditure of the Port would be secured." It was explained, however, that for some years an annual extra grant would be required until a "depreciation or reserve fund from which the steamers, vessels, buoys and other plant of the Port could be renewed."

The Lieutenant-Governor's plans and proposals have been sanctioned by the Government of India, with the exception of the proposed grant for a depreciation fund, regarding which orders are deferred.

On the 31st March 1873 there were 72 pilots on the Government list, and 42 licensed pilots. Of the

The Pilot Service.

Government pilots, 69 were on active service, and were distributed as follows:—Running pilots of all grades, 64; in command of pilot vessels, 4; in command of steam-tugs, 1; on detached duty, 1; on leave, 2. Thirteen of the Government pilots in active service were on the salaried list, and the remaining 59 on the free list. Of the 42 licensed pilots, viz. 23 master pilots, 11 mates, and 8 leadsmen, 31 of the pilots and 7 of the leadsmen were running;

one pilot was in charge of a steamer, and another in charge of a steam tug; one pilot and one leadsman were on leave. The work of each pilot, as compared with the preceding year, was—

	1871-72.	1872-73.
Each branch pilot ...	48 ships.	36 ships.
„ brevet branch pilot	29 „	25 „
„ master pilot ...	18 „	18 „
„ mate ...	11 „	20 „

The Lieutenant-Governor is glad that the inequality in the number of vessels falling to each grade of the pilots is now somewhat less glaring than it formerly was.

The following statement shows the number of steamers and sailing vessels which have entered and left the Port of Calcutta in each of the years 1870-71 to 1872-73. The steady increase in the number of steamers, and decrease in the number of sailing vessels, continue.

ARRIVALS.			DEPARTURES.		
1870-71.			1870-71.		
	No.	Tons.		No.	Tons.
Sailing vessels ...	672	666,431	Sailing vessels ...	687	680,345
Steamers ...	259	327,956	Steamers ...	251	319,315
	931	994,387		938	999,660
1871-72.			1871-72.		
Sailing vessels	658	704,661	Sailing vessels ...	687	672,257
Steamers ...	301	294,953	Steamers ...	293	285,266
	959	999,614		980	957,523
1872-73.			1872-73.		
Sailing vessels	608	621,637	Sailing vessels ...	631	643,022
Steamers ...	340	528,011	Steamers ...	323	490,605
	948	1,149,648		954	1,133,627

There have been 62 groundings as compared with 77 last year.
Groundings. One resulted in a total loss.

There were seven cases of collisions as against six last year.
Collisions. One case resulted in the total loss of the steamer *Aral*, which was run down

by the P. and O. Co.'s mail steamer *Khedive* just after she left her moorings on the 13th August 1872. The Committee appointed to inquire into the circumstances were unable to come to a final decision, owing to the absence of the officers of the *Khedive*. The pilot was afterwards tried by a Marine Court and was acquitted. The Port Commissioner also held an inquiry into the conduct of the Assistant Harbour Master who was on board the *Aral*, and he was sentenced to suspension from rank and pay for five months. With the sanction of the Government of India rules were laid down in consequence of this

accident to regulate the passage of vessels down the river at the time of departure of the mail steamers.

In last year's report it was stated that the Lieutenant-Governor's proposal to grant him the power to stop in the river any steam vessel which causes a serious collision was still under discussion. The question has since been fully examined in communication with the Bengal Chamber of Commerce and the representatives of the shipping interest of Calcutta. Pending the action of the legislature, the Government has resolved to take advantage of its power over the pilot service to secure the detention of colliding vessels, in cases of a serious nature, for at least thirty-six hours, in order to give time for effecting a preliminary examination into the circumstances of collisions.

With few exceptions, the channels of the River Hooghly have been throughout the year in a satisfactory condition. The Middleton

Channels of the Hooghly.

Sand has somewhat encroached on the anchoring space at Saugor Roads, but the inconvenience likely to result from the silting up of the Rangafulla Channel was prevented by the opening out of the Bellary Channel, which had not been used since 1760.

The houses of refuge were visited several times during the year, and one house, which had been washed away, was rebuilt.

Houses of refuge.

The number of certificates of survey of steam vessels granted under Acts V of 1862 and I of 1868 was 115, seven of which were for periods of less

Survey of steam vessels.

than six months, and two vessels were resurveyed before the expiry of their certificates on account of accidents to their machinery. The Government of Bengal has been during the year in communication with the Government of Bombay regarding the survey of certain classes of steamers. Under the Bengal Acts V of 1862 and I of 1868 vessels plying in any of the rivers or waters within the provinces subject to the Lieutenant-Governor of Bengal are liable to be surveyed twice every year. Steamers trading to any port out of India are not so liable. In the case, however, of steamers coming out of Calcutta with a Board of Trade certificate and loading for Bombay or any other Indian port, the Acts would come into operation, and the vessels would be resurveyed, however recent their current certificates might be; neither the Board of Trade's certificates nor those of other Indian Governments being recognized. The hardship of such cases became more apparent after the opening of the Suez Canal, as owing to the shortness of the voyage a steamer with a Board of Trade certificate might arrive at Calcutta, where she would be compelled, if afterwards going to Bombay, to be resurveyed, and would reach the latter port with two certificates whose currency was not exhausted, and then be compelled to undergo a third survey and take out a third certificate. The Government applied such measures of relief as the law permitted, but was of opinion that it should possess the power of enforcing resurvey under certain exceptional circumstances.

Fourteen vessels were registered under the Merchant Shipping Act of 1854, and one under Act X of 1841.

* Registration of vessels under the Merchant Shipping Acts.

The increase in the trade of the Port of Calcutta, and the necessity for providing for the acceleration of business in connection with the Suez Canal-borne trade, forced upon Government the question of the expediency of combining the offices of the Collector of Customs, of the Commissioners for improving the Port, and of the Shipping Master, under one roof, and plans and estimates for effecting this object are now under preparation. It is hoped that the building will shortly be commenced.

The increase in the value of the trade from the Chittagong port was unprecedented. Much attention has been given by the Lieutenant-Governor during the year to the improvement of this port and of its facilities. The want of a steamer for the purposes of the port has been supplied to a certain extent by placing the *Teesta* at Chittagong; the pilot service has been remodelled; the rate of port due for balam boats has been reduced; and a chart of the coast has been published. The excavation of the Mohesh Canal leading to the port, the construction of a jetty and warehouse, and the supply of two new pilot boats, a buoy vessel and a set of moorings, were still under consideration at the close of the year, as well as the question of defending the Kootubdea Light House and the Norman Point beacons from the encroachments of the sea, or of substituting new beacons on different sites in lieu of them.

In the cyclone which occurred at the latter part of June 1872 at the head of the Bay of Bengal, the four ships *Champion*, *Rothsay*, *Omaha*, and *Solway*, were wrecked. The two former left Saugor outward bound on the 27th June with a low barometer and an east wind. The Committee of Inquiry into these two cases expressed an opinion that a general order should be given to the officers of the pilot service that vessels should not leave Saugor for sea in the months of June and July with threatening weather, low barometer, and every indication of an approaching gale at hand. The other two were inward-bound vessels. In the case of the *Solway* the Committee were of opinion that she was lost through the negligence of the Captain, whose certificate was suspended for one year by the Government of Bengal.

A set of warning signals has been adopted for exhibition in different parts of the Hooghly and at Saugor, and rules have been laid down prohibiting pilots from taking ships to sea when the danger signal is hoisted.

On the 12th July the ship *Harry Warren* was wrecked on the coast of Orissa. As only two men and a boy escaped, no satisfactory evidence could be obtained of the immediate cause of the loss of this vessel.

The ship *Ticonderoga*, of 1,300 tons, an American built vessel, being upwards of 20 years old, with no classification, left Jeddah in August. She had a crew of 52 lascars, and 18 passengers, returned pilgrims. On the 25th October she was wrecked on the Orissa coast, when 32 souls were lost. The Committee of Inquiry in this case drew attention to this particular class of vessels, a number of which are sailing out of Indian ports more or less in an unseaworthy condition.

filled with British subjects. These vessels are without any classification, but obtain surveyor's certificates for the voyage or monsoon.

The Government of Bengal thought that this absence of a system of certificating sea-going ships of the Indian trade was clearly a blot, and was of opinion that we should have periodical surveys as in the case of steam vessels sailing under the British flag or carrying Indian or English crews, or ships which are not registered at Lloyd's as A 1, or whatever other letters may be admissible with survey.

The Lieutenant-Governor has again had occasion to congratulate the Port Commissioners on their most successful management of the great public interests entrusted to them, and on the vast benefit to the commercial and general community resulting from their labours. An immense change has been and is being wrought in the Port of Calcutta, and the facilities afforded to trade are being increased in a most marked manner.

FINANCES OF THE PORT.

The following statements show the financial condition of the Port.

In the wharves and jetties department a total expenditure of Rs. 22,88,787 has been incurred for port improvements since the 17th October 1870, the date on which the Port Commissioners were first appointed, up to the 31st March 1873. During 1873-74 a further sum of Rs. 12,46,063 will be required for the same purpose, making a total expenditure of Rs. 35,34,850, of which Rs. 27,00,000 will be covered by loans, and Rs. 8,34,850 will be paid for out of profits. The net revenue for the same period was Rs. 8,98,796.*

The block of the Port proper now stands thus:—

	Rs.
Value of block for which a debt of Rs. 17,65,000 was incurred ...	17,87,445
Cash balance invested in depreciation fund	27,555
Value of additions to block paid for from profits	1,03,681
Total	18,68,681

The income and expenditure for the past two years has been—

<i>Income.</i>			<i>Expenditure.</i>		
	1871-72.	1872-73.		1871-72.	1872-73.
Jetties ...	3,63,706	4,09,440	Jetties ...	2,01,778	2,43,911
Inland wharves ...	1,98,456	2,01,834	Inland wharves ...	48,043	68,381
Port proper ...	4,48,111	5,43,020	Port proper ...	2,80,939	3,95,168
Strand Bank lands	78,259	79,118	Strand Bank lands	19,849	23,725
Total	10,88,532	12,33,412	Total ...	5,51,609	7,31,185

The Commissioners have now available a line of seven jetties with corresponding goods sheds to accommodate the sea-borne trade, and a considerable wharf frontage for the convenience of the inland trade, supplied with all the necessary appliances. Jetties 2 and 3 and 8 and 4 have been connected so as to form a continuous wharf, and the work between 5 and 6 and 6 and 7 is well advanced. These jetties, with three steam cranes and other appliances, are the greatest possible

* This includes the revenue from Strand Bank lands.

convenience to the Suez Canal steamers, which can now unload at the jetties in less than half the time it used to take when cargo-boats were the only means of getting goods to shore from a vessel's hold. Considerable progress has been made in constructing export sheds and the new river-side road. For the convenience of the country-boat traffic the bank has been sloped, sheds for sheltering goods are being erected, and a large pontoon connected with the shore by a bridge has been almost completed, which will serve as a wharf for the country boat trade.

Some progress has also been made in the construction on the Strand Bank lands of warehouses to accommodate the jute trade.

Jute godowns.

In the department of the Port proper the Commissioners have resolved to provide a depreciation fund, to which will be annually credited the sum of Rs. 55,110 to cover the wear and tear of the block of the Port.

Depreciation Fund.

In addition to this, the Commissioners found themselves in a position to apply the sum of Rs. 80,000 towards a reduction of Port charges.

Reduction of Port charges.

The Lieutenant-Governor has given up to the Commissioners a sum of Rs. 80,000, representing two years' rental of the Strand Bank lands, to be applied towards the construction of a new river-side road. It is hoped that before long there will be a road and a line of public wharves the whole length of the town. The opening of a railway station, in connection with the Eastern Bengal Railway, on the river side will be a great benefit to the trade of the Port with the eastern districts.

Strand Bank lands.

CHAPTER XII.

THE WEATHER, CROPS, AND PRICES.

THE season of 1872-73 afforded a strong contrast with the preceding one. Whilst the summer of 1871 was tempered by occasional showers, and the rainy season itself was marked by an unusually abundant fall of rain, the summer of 1872 began with an unusual drought, which continued to be the prevailing feature throughout even the months of June and July. This state of things of course told differently on different localities in regard to the prospects of the crops.

The rains, however, though scanty, were, on the whole, happily distributed, and gave an excellent early crop in the higher lands of Behar and in all the hilly countries of Chota Nagpore and the Sonthal Pergunnahs. It was stated in also last year's report that the early rice crops of Bengal were fair. Apprehensions were being felt for the late or main rice crop over a great part of the country, but hopes were expressed that it might turn out well, and that the cold weather crops would be favorable. These hopes were realized, and the long delayed rain in October so saved the rice crops that in most of the districts of Bengal the outturn of late or amun rice was average, or even better than the average. The rainfall of the principal stations in Bengal whose observations were taken is given in statement I. A 3 in the Appendix. A brief account is given below of the results of the harvest in the different divisions of the province.

In the Burdwan Division the outturn was fair. The harvest over a great part of Midnapore was excellent. In Bancoorah and Beerbhoom there were good crops, and although in Hooghly the losses in some places were serious, and in Burdwan it was possible to see from the railway considerable tracts left without any cultivation close to the station, these losses were peculiarly local, and the general rice crop was not very deficient. The cold weather crops were unusually good and abundant throughout the division.

The state of the crops and weather was also satisfactory in the Presidency Division. In the beginning of the year the fall of rain was scanty, and there were apprehensions of a drought, but happily for the people this did not continue long. By the middle of May rain fell in more or

less abundance, and the prospects of agriculture brightened. In Nuddea and Jessore the effects of the fearful inundation of the previous year were to a considerable extent got over, and the ryots again looked cheerful and contented. Owing to inequalities in the fall of rain in different parts of the division, all did not reap a bumper harvest; but the average yield was fair.

The yield of the indigo plant in the districts of Nuddea and Jessore was particularly good, and the planter was able to make up for losses sustained in the two previous years. This, no doubt, is due to the inundation of 1871-72, which had the effect of enriching the soil a good deal. The produce of the date tree in Jessore was unusually rich, owing to the same cause.

In the 24-Pergunnahs there was in April 1872 a rather singular atmospheric phenomenon in the shape of a whirlwind confined to a single village in the Satkhirah sub-division, which was attended with loss of life and considerable damage to property. In both Nuddea and Jessore there were partial inundations, confined in the former district to parts of the Meherpore, Chooadanga, and Sudder sub-divisions; and in the latter to the Magoorah, Nurail, and Jhenidah sub-divisions; but they were not nearly so serious as those of the previous year, and were generally beneficial to the late rice crops. On September 20th both these districts were visited by a cyclone of some violence, accompanied by heavy rain, which did considerably more damage to the houses of the ryots than to the crops. This cyclone was severest in the Kooshtea sub-division, where subscriptions had to be raised to help the poorer inhabitants in reconstructing their houses.

In the Rajshahye Division, upon the whole, the rainfall was below the average, and not well distributed throughout the first six months of the year. The early crop was notwithstanding an average one. The *boro dhan* was good. The late rice in Moorshedabad was below the average, as the October rain came too late for it. In Rungpore, on the contrary, the outturn was first-rate, and it is reported that the yield of rice was considered too good by the ryots, as the prices were thereby kept down. This idea will no doubt cease to exist when there are better means of exit for superfluous produce. The inundation was a sufficient, but not an excessive, one. Indigo was abundant; the mulberry crop was a good one; jute was a very good crop. It is said that the cultivation of mulberry, and even rice occasionally, is making way for jute. The Bengal ryot, however backward he may be in other respects, is certainly not so in taking advantage of a demand for produce suitable to his lands, and may fairly be trusted to supply any demand that is likely to arise at remunerative prices. The ryots display an avidity, and not reluctance, in increasing the cultivation of a staple if they find it will pay. The cold weather crops gave a fair outturn.

The year was marked by the passage of the cyclone above alluded to, which was disastrous all over the Pubna district, and did a great deal of damage at Serajgunge.

There was abundance of rain in Cooch Behar, and the crops of that division were excellent.

Throughout the division the weather may be said to have been favorable. The rainfall in Dacca, Furreedpore, Backergunge, and My-mensing, was decidedly short of an average; but the rain there fell seasonably, and the rivers were late of rising, so that the rice crops were a good average, though not equal to the crops of 1871, except a part of the south of Backergunge, which was perhaps not up to full average. In Sylhet and Cachar, on the other hand, the rainfall was exceptionally high, and the rice crop splendid. Some rice is said to have been left unharvested in Bhowal Dacca. They depend on reapers of Biakrampore, and these had enough occupation at home during the year. The tea crop was short of the previous year by about 316,000lb, but still was larger than that of 1870-71.

Cold weather crops, as a rule, were not good in this division with the exception of the sesame oil seed. Mustard is perhaps the most important one, and it was poor.

Jute was cultivated to such an extent, that it was sometimes said that the price in the market would not pay for the labour to prepare it. Great numbers of people cultivated more than they could prepare without hired labour, and this was found to leave so small a profit that some few persons even preferred to leave the crop uncult. The crop of the present year is very much smaller than last year, but not probably less than it was three years back. The immediate cause of the large crop last year was the high prices which ruled from January to March, just immediately before sowing time, which led to about 25 to 30 per cent. more land than usual being sown with jute. Prices at the present time are about the same as they were three years ago, so that the cultivators need fear no loss from this staple as yet.

In the beginning of the year the weather in the Chittagong division was dry and unfavorable for the growth of the cold weather crops. There was a longer cessation of rain than was desirable during June, and some fears were at one time entertained for the early paddy. In the district of Chittagong, however, the outturn of rice was favorable. In Noacolly also the general state of the crops was good. The early crop of rice suffered in Tipperah from drought, but the late crop was a very fair average one. The cultivation of jute was very widely extended in this district.

A cyclone passed over Cox's Bazaar, in the Chittagong district, on the 28th and 29th October 1873, which did considerable damage. Many lives were lost both by the fall of houses and trees, and numbers of cattle were destroyed.

Throughout all the districts of the Patna division the crops on the whole were generally good, and nowhere was there any severe loss, save in isolated portions of the Chupra district, from inundation; and in small portions of the Shahabad and Gya districts there was a certain amount of rice land unsown owing to a deficiency of rain. Generally speaking the rainfall was scanty throughout the division, but it may be said that though scanty, it was for agricultural purposes very seasonably distributed, and this is really of more importance than the quantity which

falls. On the south side of the Ganges the rainfall was considerably below the average. Thus in Patna it was 34·2 inches, against an average of 37·61; in Gya it was 27 inches, against 46, which fell in the previous year; in Shahabad it was 36, against 45. In all these districts there was at one time serious apprehension about the rice crop, and about the rubbee; but rain fell most opportunely at the end of October, which saved the rice crop, and in March, which saved the rubbee. In all these districts there was a good early rain crop, a fair (12 annas) rice crop, and a fair cold weather harvest. In all of them also the poppy, which was at one time expected to turn out badly, exceeded the estimate. A very similar report has to be given for the districts north of the Ganges. The rainfall was less than the average, but it was seasonable. In Tirhoot and Chumparun the crops were in most places above the average. Great fears were entertained for the rubbee at one time, and the poppy sowings were no doubt in many places a failure; but on the whole a very fair outturn was obtained, though in the north of Tirhoot and Chumparun violent hailstorms, in March, proved seriously destructive to some isolated tracts of country. The rice crop was good, and the outturn of indigo greater than has been known for years. In Chupra devastation was caused by floods in the extreme west over a portion of country in the Hutwa estate, and also over a small portion of country in the south-east of the district exposed to the floods of the Gunduck.

In the Bhaugulpore Division in the low lands subject to the inundations of the Ganges and its tributaries, the early crops, which in average years are more or less injured by the rise of the rivers, were last year a complete success; while in the more elevated tracts of the south they were much as usual. The late rain crops were saved by an abundant fall of rain in the latter end of October. All things considered, the season was generally prosperous. The Purneah district, which has more of the characteristics of Bengal than of Behar, seems to have been best off in all respects. The southern portions of Monghyr are more liable to extremes of temperature by reason of close proximity to the hills. The soil is generally poor, and the quantity of rainfall during the year was extremely low. The failure of the crops was in that district somewhat serious. The indigo crop of the division was excellent, and the cold weather crops were all very good indeed.

In Orissa the early part of the year was excessively hot and dry. The rains did not set in till late, but when they fell, they fell with excessive violence, and eventually culminated in a severe cyclone in Balasore on the 1st July, and disastrous floods in Cuttack and Pooree during the first half of that month. After the passing off of the floods, the rest of the season was happily in every respect favorable. Both zemindars and people set to work vigorously to re-sow or replant their crops, which had in many places been swept off the ground. Strange to say, there was very little loss of life, though large numbers of valuable cattle perished, and the people sustained great damage to their houses and homesteads. The rice-fields, covered everywhere with a fertilizing silt, were resown with the damp and germinating seed-grain saved

from the wreck of villages. In many places the grain was thrown on the ground as the flood subsided, in others seed beds were prepared, and the planting out of rice went on until very late in the year. The general results were good; much of the early rice was lost in the flood, but the lands yielded an after and cold weather crop of pulse. Many large low lands, too deeply flooded to plant with rice, were utilized for cold weather oil-seeds. The general yield of rice was above the average, and the winter crops of pulses and seeds proved very fine, and gave the people a remunerative harvest, such as they have not had for many years past.

The rainfall in Chota Nagpore was below the average. It cannot

Chota Nagpore.

be said that the harvest was abundant in any part of the division, and prices ruled high, and continued to do so, indicating that there is but little grain in store. In Hazareebaugh the early sowings of rice did not succeed; but as the rains continued late, the great rice crop was a fairly good one, though the succeeding cold weather crops again suffered from drought. In Lohardugga, where there was more rain, the crops were generally good, except in Palamow. In Singhbhum the harvest was a fair average one. In parts of Maunbhoom the rice crop was almost a total failure; in others there was good crop.

Taking the Assam province as a whole, the crops were excellent.

Assam.

In Kamroop, Nowgong, Mungledye (western part of Durrung), and in

Lukhipore, the principal rice crop was an excellent one, and yielded a full harvest. In the eastern portion of the Durrung district there was a slight falling off, and in Sebsaugor the late rice crop was behind the average, except in the Golaghat sub-division, which was more fortunate. But although the late crop in parts of Sebsaugor was not so good as usual, the district quite made up for any loss in this respect by the excellent harvest the people obtained from the early crop; and the sugar-cane crop, which failed in Durrung, yielded a fair return in Sebsaugor: so that on the whole this district was as fortunate as the remaining ones in this division. The out-turn of mustard seed was not so good as usual in any of the districts in Assam. The early months of the cold season passed without any rain, and not only was there less land with mustard seed under cultivation, but in some places the crops were partly destroyed by insects. The weather for tea was very favorable; in the early part of the year it was perhaps too cold, and there was scarcely enough rain at times; but the outturn of tea was satisfactory, and a good deal more than in the previous year.

Upon the whole the results of the past season have thus been fortunately fair, and in some places excellent. It must also be remembered

Failure of crops during the present season, and prospects of impending scarcity.

that the harvests of the previous years have also been generally prosperous. But in the present year the autumn crops have failed and scarcity is threatened. Little more than half the average rainfall has fallen in the Provinces. In Calcutta only 44.81 inches have fallen against an average of 68.34. In the great rice producing district of Dinagapore only from 30 to 40 inches have fallen against an average of 84.59. In October no rain fell in that district,

and in September only 1·62 inches. In Patna only 30·21 inches have fallen against an average of 37·61, and in Tirhoot 29·03 inches against 44·47. In neither of these districts has any rain fallen in October; and in September only 0·94 and 2·82 inches respectively against an average of 2·55 and 3·56 in October, and 7·43 and 8·84 in September. The prospects of the harvest at the present time (early in November) are very bad. Want of rain is the general complaint throughout the country with very few exceptions; slight showers have fallen in some places, but are too local to be of any great advantage to the rice crop. In most of the districts the late rice on high lands is past recovery; the rice on low-lands is also suffering, and has been seriously damaged. The cold weather crops have not been sown in many places for want of moisture, and where they have been sown they are germinating slowly; but in some places they are doing well. The Patna Division and parts of the Rajshahye Division are suffering most; the districts of Sylhet, Backergunge, Noakhally, Chittagong, the Orissa districts, and parts of Assam, are the only places where the prospects are fair, but in a few other districts it is thought that the outturn will not be very disastrous.

The whole subject has been under the careful and anxious consideration of the Viceroy and Lieutenant-Governor. Much distress among the poor in Behar and North Bengal is certainly inevitable, and relief works have been declared necessary. The season is one of the profoundest anxiety; but at present it can only be said the Government and the officers of the province are fully alive to the emergency. No measures and pains will be spared to enable us to stem the tide. The results of the season must be left to be chronicled in another year.

PRICES OF FOOD AND LABOUR

In connection with this Chapter may be noticed the prices of food and labour which are not otherwise placed.

The following statement shows the retail prices of rice, of wheat, of barley, of gram, of the common millets, and of salt in selected districts in these provinces during the year 1872-73.

Prices of food and labour.

Statement showing monthly variations in the retail prices of food in one selected district in each division of Bengal, from April 1872 to March 1873.

NAME OF DISTRICT.	NUMBER OF SEERS OF 80 TOLAHS WEIGHT PURCHASEABLE FOR A RUPEE.											
	Common Rice.											
	April 1872.	May 1872.	June 1872.	July 1872.	Aug. 1872.	Sept. 1872.	Oct. 1872.	Nov. 1872.	Dec. 1872.	Jan. 1873.	Feb. 1873.	March 1873.
Burdwan	23	23	23	23	21	22	21	23	23	22	22	24
24-Pergunnahs	18	17	20	20	17	16	17	18	17	17	18	17
Moorsheadabad	20	23	21	18	18	19	19	19	22	22	22	22
Backergunge	27	25	25	26	27	27	27	27	28	29	31	28
Chittagong	23	22	23	23	22	23	23	27	27	26	23	23
Patna	21	21	20	19	19	21	19	20	25	24	23	23
Bhagulpore	23	28	21	19	20	18	18	17	17	22	20	20
Poorce	25	31	28	23	23	24	34	32	31	29	26	26
Hasareebaugh	23	20	20	18	16	16	18	18	18	17	18	17
Kamroop	24	..	20	20	..	20	26	20	20	25	25	26

Wheat.

Burdwan	18	14	16	15	15	14	13	12	12	11	10	16
24-Pergunnahs	19	17	18	18	16	14	12	13	12	12	11	12
Moorsheadabad	23	18	20	16	15	16	15	15	18	15	13	13
Backergunge .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Chittagong	12	15	15	14	15	14	15	15	15	12	8	10
Patna	22	21	21	17	17	16	15	17	17	16	18	17
Bhagulpore	19	19	18	17	16	16	15	15	15	18	12	16
Poorce	14	14	16	14	13	13	14	17	17	15	15	17
Hasareebaugh	20	18	19	16	14	13	14	15	16	12	15	16
Kamroop	19	..	20	20	..	12	16	10	10	13	18	13

Barley.

Burdwan	20	20	21	21	21	21	21	21	22	22	22	22
24-Pergunnahs	22	19	16	20	22	14	25	20	20	20	20	20
Moorsheadabad .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Backergunge .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Chittagong .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Patna	32	33	31	29	27	29	20	34	36	..	31	28
Bhagulpore	36	36	32	30	25	25	24	24	25	22	..	31
Poorce .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Hasareebaugh	28	24	24	23	20	17	19	20	20	23	24	24
Kamroop .. ..	..	..	..	..	..	..	..	..	..	..	..	..

Millets and Indian-corn.

Burdwan .. ..	..	..	..	..	..	..	..	..	..	..	..	..
24-Pergunnahs .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Moorsheadabad .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Backergunge .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Chittagong .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Patna	35	34	31	30	45	35	32	32	38	35	35	40
Bhagulpore	35	33	..	..	..	38	32	35	37	35	34	31
Poorce .. ..	..	..	..	..	..	..	..	..	..	..	..	..
Hasareebaugh	26	29	28	25	23	20	35	33	28	27	..	..
Kamroop .. ..	..	..	..	..	..	..	..	..	..	..	..	..

NUMBER OF SEERS OF 80 TOLANS WEIGHT PURCHASEABLE FOR A RUPEE

NAME OF DISTRICT	Gram											
	April 1872	May 1872	June 1872	July 1872	Aug 1872	Sept 1872	Oct 1872	Nov 1872	Dec. 1872	Jan 1873	Feb 1873	March 1873
Burdwan	23	23	22	23	23	22	23	22	21	23	22	25
24-Pergunnahs	10	17	17	20	20	20	17	17	17	17	14	19
Moorshedabad	35	31	34	28	28	26	26	26	20	27	29	29
Backergunge	12	14	14	13	13	15	17	17	17	17	17	17
Chittagong	12	31	30	27	28	29	33	33	31	33	34	34
Patna	40	28	27	24	25	25	27	27	27	27	29	28
Bhaugulpore	25	24	24	18	14	14	21	21	21	23	23	21
Pooree	20	10	20	18	15	17	21	21	23	21	21	21
Hazareebaugh	12		12	13	10	11	12	12	10	14	13	16
Kanroop												

Salt

Burdwan	8	8	8	8	9	9	9	9	9	9	9	9
24-Pergunnahs	8	8	8	8	8	8	9	8	8	8	8	8
Moorshedabad	8	8	8	8	8	8	8	8	8	8	8	8
Backergunge	7	7	7	7	7	7	9	9	8	9	9	9
Chittagong	7	7	8	7	8	8	8	8	8	8	8	8
Patna	7	7	7	7	8	8	8	8	8	8	8	8
Bhaugulpore	7	7	8	6	7	8	8	9	9	9	9	9
Pooree	6	6	6	6	7	7	7	7	7	7	7	7
Hazareebaugh	7		8	8	8	7	7	7	7	7	8	8
Kanroop												

The year throughout was fairly prosperous and nothing occurred calculated to seriously run up prices, or in any way to affect the ordinary market rates which have ruled of recent years. Notwithstanding that the prices of food and of labor have risen of late years, the rise is apparently so gradual as to be imperceptible in a succession of ordinary years. On account of a bad season the rise is sudden and rapid, and though there is a consequent fall in such cases it is complained that prices customarily do not fall fully, but remain higher than they were before the rise took place. An account is annexed of the chief variation of prices on the civil divisions of Bengal during the year.

In the Burdwan Division it is stated that there were no material variations in the prices of food. In consequence of the partial failure of the rice cultivation in the Burdwan district, it was expected that the price of rice would rise, but the market was kept stationary by importations from other districts. In the sub-division of Jehanabad, where the fever was very prevalent, the prices were higher than ordinary. In Bancoorah the prices varied a good deal with the seasons from Rs. 2-10 to Rs 1-10 per maund. In Beerbhoom prices were decidedly above the average; in Midnapore and Hooghly they were steady. The prices of rice averaged in this division about 23 seers for a rupee, against 24 or 25 seers in the previous year. The wages of labor are not much affected by the proximity of the districts to Calcutta. Good wages are realized near that City, but in the more remote Western

districts labor is very cheap. The wages of an unskilled laboring man at Bancoorah are Rs. 3, and of a woman Rs 2 a month. Two annas is a fair daily remuneration; skilled laborers get four annas per diem. In Midnapore, in the jungles to the west, it is stated that only one and a half anna is paid to a man for a day's work. In the east the Public Works Department pays three annas a day to a man and something less to women and boys

From the Presidency Division it is also reported that the prices of food and labor were much the same as usual, petty fluctuations here and there excepted. "It is a well known fact," writes the Commissioner, "that the price of almost all articles of food has of late years generally risen; the same is the case with labor. Carpenters and masons now command from 6 annas to 8 annas a day each, thatchers from 4 to 5 annas, blacksmiths 6 annas, and ordinary unskilled laborers 3 to 4 annas each." The prices of rice varied last year from 16 to 20 seers in Nuddea and the 24-Pergunnahs, to 29 and 30 seers in Jessore.

There has been no great fluctuation in the Rajshahye Division. Rice was cheapest, as usual, in the great rice-producing districts of Dinagepore, Rungpore, and Bograh, where it averaged nearly 30 seers for a rupee; but in all the districts of the division, which is ordinarily much more than self-supporting in the way of food grains, prices were low.

In no parts of the division did common rice sell dearer than 20 seers for a rupee. The wages of labor within Rajshahye Division was, for laborers from 2 to 3 and 4 annas, and for carpenters, smiths, and masons, from 4 to 6 annas

In the division of Cooch Behar prices are high and increasing. Common rice, which in 1871 sold for 28 seers the rupee, had in 1872 risen to 16; the prices rise with the expenses of traffic. All kinds of grain and salt are dearer than in the neighbouring country; rice is sold from 12 to 20 seers. Ordinary laborers and boatmen demand Rs. 7 to 10 per mensem; mechanics from Rs. 15 to 25. In the Julpigoree district the prices are somewhat lower.

In the Dacca Division food generally was more abundant and cheap than in the previous year. Labor, however, was no cheaper, and the Commissioner can see no ground for supposing that it ever will be: all the labour, or nearly all, that is required for the business which is being every day developed by European capital and enterprise in the division, has to be got from other parts of the country. In Furreedpore rice was slightly dearer; in Dacca and Backergunge it was slightly cheaper. In Mymensingh rice was averaged at 32 seers a rupee; in Sylhet rice was cheap. The crop of the previous year had been very large, and much of it had been held by the ryots in hope of better prices, but with a second good season they gave up this hope and sold for what they could get. In Cachar food was cheaper in consequence of the abundant crop, and labor in that district, the great home of the tea industry, is very dear.

In the Chittagong Division prices remained steady at Noakhally and Tipperah, but were subject to more fluctuation at Chittagong, as would

Chittagong

naturally be the case at a seaport of considerable commercial activity. Prices varied from about 23 to 35 seers for a rupee. The Magistrate of Tipperah remarks that men in that district grow enough for their own consumption, so there is no great internal demand, and competition is almost excluded. Prices are raised by exportation. In the famine year of 1866 rice rose to nearly Rs. 4 a maund, an extraordinary price for such a large producing district; but this price was paid by outsiders, and most of the people continued to eat their rice at the price it cost them to produce it, while they received a handsome sum for their surplus stock. Daily wages have rapidly risen in this division. Laborers now get 4 annas a day where they used to get 6 pice only. Skilled labor receives higher pay, but not in the same ratio. Indeed even nominally there is but little of this labor, and it is of an inferior kind. Those who are not in some way connected with the land, are said to fare but badly, for the demand for any labor is uncertain and temporary.

Taking the rates of food all round, the people of the Patna Division were not worse off than usual during the year 1872; perhaps they were even

better off. The following statement gives the average price of the common food grains during the year in each district of the division:—

	Common rice		Wheat		Maize		Barley.
	24 seers for a rupee		18 seers for a rupee		20 seers for a rupee		32 seers for a rupee
Patna	24	"	18	"	20	"	32
Gya	23	"	20	"	20	"	35
Shahabad	18	"	18½	"		"	
Tirhoot	20	"	19	"		"	53
Sarun	10	"	15	"		"	
Chumparun							31

In the Patna district prices were as low as any year since the scarcity of 1865, while labor was abundant for all who sought it. The Magistrate gives the money rate paid in the district for unskilled agricultural labor at 2 annas a day for men, and 1½ annas for women, the rates which have been prevalent for years; while for skilled labor, such as a mason or a smith, the wages were 4 annas a day in the town, and 3 annas in the country, showing a rise of 15 per cent. in the last five or six years. In Dinapore 2 annas a day was the minimum, and it is said that the irrigation works were producing a sensible effect on the price of labor. In the Gya district the agricultural laborer is said to be worst off in the division. His wages are generally paid in grain, some two to three seers representing a money value perhaps of 1½ annas. In the Shahabad district prices of food were a good deal more favorable in 1871-72 than they were in 1872-73; but that year, which was marked by an unusual fall of rain, was peculiarly good. It is remarked that the large influx of people, Europeans and Natives, in connection with the Canal Irrigation scheme, has not caused any noticeable rise in the price of articles of food. To the north of the Ganges prices were settled. In Tirhoot the prices of rice were rather high during June, July, and August, but barley, which is a great stand-by of the people, never sold for less than 28 seers, though that is a slight

rise on the two previous years. The staple food, however, of all classes in the north and east portions of the district is rice, and in other portions rice is the main support, though largely supplemented by barley. The rise in the price of rice is nevertheless, says the Commissioner, not so seriously felt as might be supposed. The laborer is everywhere paid in kind, and consequently, unless the increased price comes from real scarcity, it does not directly affect him much. In harvest time the laborer is paid a percentage on the outturn. At the time of rice harvest, says the Magistrate, it is hardly possible to get coolies to work for ordinary cash payments, so much more to their advantage is it to be remunerated in grain. In a general way the ordinary rate for unskilled labor may be put down at $1\frac{1}{2}$ annas per diem, while carpenters and masons, &c., get from 2 to 4 annas. As compared with the previous years' returns, there was a slight rise last year in the prices of food in the Sarun district. The rates contrasted with other districts are high, and perhaps due to the inundation that occurred. Labor, however, has been as cheap as ever. From the district of Chumparun no change is reported, but the agricultural classes in that district are badly off, and the wages of labor very low.

The price of food varies considerably in different parts of the Bhaugulpore division, and exportation, as elsewhere, rules these prices in a greater degree than the outturn of the crops. The prices during the year under report are much the same as in the preceding year, though in some parts the price of certain articles rose at one time, generally with a tendency to fall after the rice harvest had been gathered. The annexed table gives the average price of the chief staples in the districts of this division :—

	Common Rice.	Wheat.	Gram.
	18 seers for a rupee.	16 seers for a rupee.	24 seers for a rupee.
Monghyr ...	18	16	24
Bhaugulpore ...	19	16	26
Purneah ...	25	17	22
Sonthal Pergunnahs ...	22	14	19

The price of labor is cheap, but varies, and the practice of paying in kind largely prevails. Generally speaking the price of labor is cheaper in the south of the division than in the north. The ordinary prevailing prices of a day labourer are stated at 2 annas daily in towns, and $1\frac{1}{2}$ annas in the country. Skilled labor is scarcely procurable outside the towns; the general rate is 3 to 5 or 6 annas a day. It is much in demand at Jamalpore, in Monghyr, where the East Indian Railway Company have a locomotive workshop. The wages there are paid at monthly rates, which vary from Rs. 10 to Rs. 30.

In Orissa the prices of food and labor were subject to temporary pressure during and immediately after the cyclone and floods, when supplies to local markets, and particularly to Cuttack, were cut off. For a few days there was difficulty in procuring rice in the Cuttack market; the nominal price was then about 18 seers per rupee; but the falling rivers admitted supplies arriving from Sumbulpore especially, and the market rapidly became steady and the supply good. The Cuttack

markets afford a fair index to the grain rates of the whole province; the rates averaged about 30 seers for a rupee. In some parts of Balasore the prices fell as low as 44 seers per rupee. No fluctuations in the rates of wages and payment for labor have been reported. There is a good demand for labor for canal irrigation and road works as well as harvesting, but the supply is sufficient. It might have been expected that the extension of the high-level canal works into the south of Balasore would have affected the rates of wages of day laborers on earth work, but so far there has been no change.

In Chota Nagpore the price of all the staple articles of food ruled high throughout the year, with an upward tendency at its close. In

Chota Nagpore.

Hazareebaugh prices were highest; the average for common rice at the station was 20½ seers per rupee. In Singbhoom, lowest; common rice averaged 30 seers for a rupee. In Maunbhoom, at the sudder station, it averaged 25 seers; but at Barabazar, of the same district, it was much cheaper. At Ranchi, the sudder station of the Lohardugga district, the bazar was always well supplied, but the average was only 22 seers. At Lohardugga, the largest mart in the district, it was four to five seers cheaper. There was nowhere any sign of want or scarcity, but the general demand on the rice market kept up the price, and it was probably felt that stock in hand was not over-abundant. Not many years ago Rs. 2 per maund would have been regarded as a ruinously high price, but since the famine of 1867-68 people are glad to get it at that rate.

The average price of the different staples of food throughout the year in the division are given in the table below. The figures denote seers per rupee:—

DISTRICT.	Common rice.	Wheat.	Barley.	Indian-corn.	Jowar.	Bajra.	Gram.
Hazareebaugh	19·4	16·6	25·6	30·6	27·2		20·7
Lohardugga	21·5	16·3	26·0	29·1			19·4
Singbhoom	33·0	16·3	28·4			13·3	18·1
Maunbhoom	23·9	14·7	24·0		39·2	35·9	16·4

Wages in Chota Nagpore have not risen in proportion to the increase in the price of the ordinary food staples. Labor is abundant, and the families are usually large. Each can afford to let one or two of its members work all the year round if required, and as these laborers have not to purchase the chief articles they use, the wages, though small, are a great help to a family. Palamow is the only place where any difficulty is ever experienced in obtaining the number of laborers required. This is chiefly because the large farmers and farming proprietors in Palamow secure and monopolize the services of the chief laboring classes. A considerable portion of the population

detest labor. To the Kharwas and Cheros it is particularly obnoxious, and the Hindu cultivators find it more profitable to devote all their energies to their own cultivation. The wages of laborers vary from 1½ annas to 2 annas daily; and of skilled labor, such as carpenters and masons, from Rs. 6 to Rs. 10 a month.

Prices in Assam, though exhibiting a general tendency to advance, did not vary materially during the year 1872-73. The labor difficulty remains as great as ever, except in tea cultivation, which after all is exotic. There is a remarkable absence of industrial activity throughout the province, and the natives of Assam do not as a rule care to work beyond what is necessary to existence with the amplest margin for perfect idleness. Coolies can with difficulty be procured on less than 4 annas a day; skilled labor is both scarce and costly; what there is being in the hands of persons imported from Bengal or Upper India. A very ordinary blacksmith or carpenter receives from Rs. 30 to 40 a month, and a common bricklayer Rs. 16. The average price of rice in the province seems to be about 20 seers for a rupee.

The subjoined statement shows the retail prices in selected districts during the months of the present year 1873, from April to November.

Statement showing monthly variations in the retail prices of food in selected districts of Bengal from April to November 1873.

NUMBER OF SEERS OF 80 TOLAHS WEIGHT PURCHASABLE
FOR A RUPEE.

NAME OF DISTRICT.	Common Rice.									
	April 1873.	May 1873.	June 1873.	July 1873.	August 1873.	September 1873.	October 1873.	15th November 1873.	22nd November 1873.	29th November 1873.
Burdwan	24	26	19	17	21	17	15	14	15	15
24-Pargunnahs	20	17	19	19	18	20	13	13	15	15
Mooredabad	22	18	18	16	16	15	13	13	13	13
Eschergunge	28	28	26	26	26	25	19	19	14	14
Chittagong	24	24	24	21	20	24	21	20	20	20
Fatna	23	18	18	17	14	14	13	12	14	14
Bhaugulpore	16	16	16	17	17	17	13	13	13	19
Poorce	42	38	34	35	35	34	32	34	34	...
Hasareebangh	17	17	16	14	14	13	12	14	13	13
Kamroop	20	20	20	25	20	20	18	18	18	18

Wheat.

Burdwan	16	13	15	13	13	13	12	10-8	10	10
24-Pargunnahs	13	14	13	13	11	13	12	...	...	...
Moorsheadabad	20	18	16	16	15	13	14	13	13	12
Backergunge	11	15	...	...	...	...	...	...	...	...
Chittagong	17	12	13	11	9	10	8	...	...	...
Patna	11	20	16	16	15	14	12	11	11	14
Bhaugulpore	18	20	17	15	15	14	12	12	12	12
Poorce	15	16	14	13	17	14	14	14	15	...
Hazareebaugh	17	16	15	18	13	12	11	9-8	10	10
Kamroop	13	12	13	13	15	16	15	13	13	...

	NUMBER OF SEALS OF 80 TOLA WEIGHT PURCHASABLE FOR A RUPEE									
	Barley									
	April 1873	May 1873	June 1873.	July 1873.	August 1873	September 1873	October 1873.	15th November 1873	22nd November 1873	29th November 1873.
Burdwan	22 8	22	25	25	26	24	24	20	14	16
24 Pergunnahs	22 8	21	20	20	20	26	23	24		
Moorshedabad										
Backergunge										
Chittagong										
Patna	28	28	27	28	26	24	18	18	17	17
Bhaugulpore	31	31	30	27	27	22	22	20	20	20
Pooree										
Hazareebaugh	24	22	21	20	18	18	16	16		
Kamroop										

Millets and Indian corn

Burdwan										
24 Pergunnahs										
Moorshedabad										
Backergunge										
Chittagong										
Patna	40	35	28	26	25	25	20	18	18	17
Bhaugulpore	27	30			26	30	21	17	17	17
Pooree										
Hazareebaugh			31	24	23	22	24	18	19	19
Kamroop										

Gram

Burdwan	26	23	23	20	19	17	19	14	14	14
24 Pergunnahs	20	22	20	20	10	20	15	12	12	12
Moorshedabad	29	30	27	24	22	21	19	18	17	16
Backergunge										
Chittagong	10	16	12	11	14	16	16	16	13	11
Patna	34	30	28	26	24	25	18	16	16	17
Bhaugulpore	25	27	26	25	25	23	20	17	15	15
Pooree	21	23	23	23	22	19	21	26	26	23
Hazareebaugh	18	17	17	14	15	11	14	12	12	13
Kamroop	13	13	10	9	10	10	12	10	10	.

Salt

Burdwan	9	9		8	9	9	9	8	9	9
24 Pergunnahs	9	6	8	8	8	8	8	8	8	8
Moorshedabad	8	8	9	9	9	8	9	9	9	9
Backergunge	8	8	8	8	8	8	8	8	8	8
Chittagong	9	7	7	7	8	8	8	8	8	...
Patna	8	8	8	8	8	8	8	8	8	8
Bhaugulpore	8	8	7	7	7	8	8	8	8	8
Pooree	9	9	9	9	9	9	10	10	9	9
Hazareebaugh	7	7	6	6	6	6	6	6	7	7
Kamroop	8	8	7	6	7	7	8	8	8	...

The year began with prices in a very normal condition, and in spite of the want of rain and the apprehensions which were openly expressed from more than one district at an early period, prices showed no tendency to rise until late in October or early in November, when the certainty of drought and a scarcity were no longer open to question. The price of rice suddenly rose in the 24-Pergunnahs from 22 to 13 seers for a rupee, and a similar rise occurred simultaneously in all the divisions of Bengal except Chittagong and Orissa, where rain had been more opportune and the prospects of the harvest were not impaired. The price of rice throughout the month of November showed no tendency to fall, and from such districts as Backergunge, where large exports were in operation, it rose in three weeks from 25 seers to 14 for the rupee. The rates of barley, millets, and Indian-corn and gram, have all risen. In April 1873 millets were selling at Patna for 40 seers; in November they had risen to 17 seers; barley had risen from 28 seers to 17; gram from 34 seers to 17. In the Rajshahye and Bhaugulpore divisions the prices have hardly risen less remarkably. At the same time it may be said that prices have not been so high as might have been expected. In no district have they yet reached famine rates, though they are, as has been shown, very much higher than they have been at the same time in ordinary years. During November 1865, the last year of great scarcity in Bengal, prices of common food stuffs stood on the whole somewhat higher than they were standing in November 1873.

CHAPTER XIII.

AGRICULTURE AND HORTICULTURE.

IN Part II of last year's Administration Report, page 397, were

General observations.

explained the Lieutenant-Governor's plans for the improvement of agriculture. His object has been to obtain some scientific knowledge of Indian soils and conditions. and thence to proceed to experiment. In a country where many intelligent men are engaged in active experiment,

Appointment of scientific professors from England.

we may proceed inductively from experiment to science. But in a country such as India, where we have little private experiment, we must proceed by acquiring the necessary science first and then making experiments. In this view two gentlemen, very carefully selected by the Secretary of State for knowledge of the branches of chemistry and botany most used in agriculture, have been obtained and added to the Educational Department.

Some progress has been made during the year towards the establishment of experimental farms.

Experimental farms and gardens.

The Lieutenant-Governor knows that there is but little reality in our farms at present, but he hopes for the future, and has persevered in getting up the form of farms in the hope that we shall put life into them afterwards.

The view we have in establishing these farms is three-fold:—(1)

His Honor's views.

the introduction of scientific cultivation; (2) the teaching improved agricultural processes for economising labour; (3) the introduction of new staple products into the country. The fact remains, however, that in practical husbandry the native agriculturalists must and will beat us until we have as exact a knowledge as themselves of the soil, climate, and plants of the country. This can only be obtained by careful and protracted observation of their modes of farming by educated European farmers, who, instead of interfering too much with the natives, will be content to watch, season after season, every one of their processes, and the way in which they encounter the emergencies of Indian agriculture. Not until we have done all this, and have become thoroughly familiar with the character and resources of native husbandry, can we hope to set up a model farm amongst them that will not bring discredit upon us by failure.

The Lieutenant-Governor therefore has dropped the term "model" farms altogether. And as to the nature of our experimental farms, our first efforts should be, His Honor thinks, not to farm directly ourselves, but to select intelligent ryots to farm after their own fashion upon our land under the supervision of our agents, encouraging them to emulate each other's efforts, and giving slight assistance for the purpose of drawing out the full extent of their knowledge and aptitude as cultivators. In the course of three or four seasons a good European farmer would then have mastered the whole extent of their resources and knowledge, and would probably be prepared with well considered plans for supplementing the defective resources of the ryot, improving his processes, introducing new ones, and establishing what we might perhaps call with propriety a "model" farm.

The prime difficulty is that we can do nothing effectual until we get a proper man to advise us at the head-quarters of the Government. It is difficult to get the man, and still more difficult to get the several men required for the various localities selected in the interior. The want of men is the weak point in the scheme. For the rest the Lieutenant-Governor would put the case thus: Bengal Proper and Orissa to form one great agricultural field. We cannot afford to start in Bengal Proper more than one farm under a really scientific farmer, but we may have subsidiary farms, as have already been established in Orissa, with secondary men in charge and civil officers to supervise. On the other hand, we have two large outlying provinces of which the people, soil, mode of agriculture, productions, &c., are materially different from Bengal, viz. Behar and the Assam Province. In Behar it so happens that Mr. Levinge, the Superintending Engineer, takes a thorough practical interest in the matter, and has a European under him of some capacity. In Behar we should do well if we had only a head agriculturalist to direct and assist the management. As for Assam the Lieutenant-Governor is most anxious to start a real experiment in the Khasi Hills, and after some delay, which was unavoidable, a man has at last been sanctioned and appointed to Shillong, who will be the Government agent and farmer for all the country attached to Assam. Practically, the whole case is narrowed to getting a good head agriculturalist for Calcutta, and the question is now under consideration in this shape. Our professors are of real worth, and if we can further obtain a good practical agriculturalist to work with them, something may be achieved.

The year, as has been remarked by one Commissioner, in connection with model farms and other matters, has been one of small beginnings in great subjects of administration.

A brief account of what has been done and established is given below.

Orders have very recently been issued by Government for the preparation of the Rishera lands in the sub-division of Serampore near the river of that name. Six hundred beegahs were purchased here some years ago for building quarters for the East Indian Railway Company, but it was not required, and has since been farmed out on

Hooghly.

lease. These lands are now proposed as the home farm of Calcutta; the railway runs right through them, and the river borders them. The lands are admirably fitted for the purpose.

There is an experimental garden farm at Midnapore, which is under the management of the Judge, Mr. Lance, who is an excellent amateur gardener; but it is to be feared that he finds it at present rather a difficult undertaking.

In December 1872 it was decided that an experimental farm should be started in Baraset in the district of the 24-Pergunnahs under the supervision of the sub-divisional officer, Mr. Porter. The farm was to consist of about 150 beegahs, situated partly in the sub-divisional compound and partly in the jail and the school gardens, with some land adjacent to the latter. A native with some pretensions to a knowledge of botany has been placed in immediate charge, and an intelligent ryot, having a practical knowledge of agriculture, has since been entertained and some progress has been made.

At Maldah, in the Chunchal Wards' estate, a home farm of some 30 acres has been started experimentally. A garden is being established on Gora Bazar estate at Berhampore.

In Dacca a small experimental farm for jute was started, and several varieties were sown. The rains, however, were so late and scanty, that the season did not turn out favorably, though some of the samples of seed came up very well.

A farm of about 50 acres on Government land close to the railway and close to the canal, has been started in the Patna Division at Arrah under the management of Mr. Gleeson, a practical gardener, and under the supervision of Mr. Levinge. Buildings were put in hand and farming operations commenced, but a disastrous flood at the end of July last, owing partly to the unfinished state of the canal embankment, did a great deal of damage, and no very successful results can be looked for in the present year. Besides this, an experimental poppy garden was started at the Meetapore jail, and the land belonging to the old Deegah jail was made over to Mr. Scott, the Botanist, for a similar purpose. Other experiments besides poppy will, it is hoped, be tried on this land. A project for small experimental farms (specially for breeding and grazing cattle) in the Durbhanga estate has also been under discussion, and the Commissioner has recommended the establishment of a farm on rather a large scale at the old Poosah stud dépôt.

In the Bhaugulpore division an experimental garden on a small scale is started within the fort of Monghyr upon Government ground, and is well managed by Mr. Lockwood.

In last report it was mentioned that in Orissa the Commissioner, Mr. Ravenshaw, had submitted to Government a scheme for small ryots' farms, which met with approval, and these farms are in course of

organization. In the farms on the irrigation canals which are managed by Mr. Toynbee, the Canal Revenue Superintendent, the advantages held out to the ryot have been the payment of his rent, and supplying him with seeds and with irrigation water free of charge, while the conditions imposed have merely been that he should observe certain directions regarding the times of sowing, method of preparing his land, and transplanting rice in place of sowing broadcast. Mr. Toynbee has experienced great difficulty in inducing the ryots to accept even these favorable terms. At least, however, it may be expected from these farms that they will show the people the advantage to be gained by early sowing under irrigation. Another grant on the ryot farm system was made in Balasore, and is being carried out under the supervision of the Rev. Mr. Phillips at Santipore. Here there are some very effective irrigation works erected on a small stream passing through the Mission farm which is cultivated chiefly by famine orphans under Mr. Phillips' supervision.

An experimental farm and plantation has been sanctioned at

Assam.

Shillong, and a manager was appointed to it in the present November. There are splendid opportunities for the establishment of an experimental, and eventually a model, farm at Shillong under really adequate management. In pursuance of the Lieutenant-Governor's instructions a tree nursery and orchard have been started there, for which a tract of land, about 1,500 acres in extent, was taken up close to the station. A supply of Scotch fir, silver fir, larch, and ash seeds, obtained from the Botanical Gardens, were sown here, but never germinated. It is hoped that we shall be more successful with another supply of seeds this year.

It must be said that the general condition of the Royal Botanical

Botanical Gardens.

Gardens of Calcutta is not yet satisfactory, and it is feared that it will not be really satisfactory for years until the trees planted out after the cyclone of 1864 begin to give shade and look ornamental, and till the ground is better worked and manured. It may be a question whether it might not be better to transfer them to the Calcutta side of the river. The gardens have, however, been actively attended to during the past year. A proposal of the Superintendent to plant out the trees more thickly in their natural orders has been sanctioned. Much attention has continued to be bestowed to the natural arrangement and cultivation of herbaceous plants. Plants of economic importance have also been tried in the gardens as an experiment. A great variety of seeds of fibre-yielding plants, received from the Commission appointed to inquire into the jute trade, have germinated, and when the plants flower, and can be identified, they may yield some interesting information. A few agricultural experiments have also been made on a small scale. Dr. Henderson has endeavoured to remedy the poor condition of the garden establishment by establishing a garden school for the boys employed in the garden, whose parents are mostly garden employes, and the Lieutenant-Governor has promised such support to this school as the Superintendent may require for it. It is a fact creditable to the teaching of the garden boys in past years, that two efficient plant collectors were found among the garden boys at a day's notice for the Andamans.

860 packets of seeds, 2,302 plants in cases, and 2,891 plants in pots, have been sent out during the year. The receipts amounted to 2,415 packets of seeds and 1,404 plants. Very few additions were made to the herbarium. It has been noticed that the list of plants supplied to Government officers in Bengal was small, and the attention of officers in charge of jail gardens has been drawn to the Superintendent's readiness to supply, as far as he can, plants and seeds for use in Government gardens.

There is some prospect of the mahogany trees about Calcutta seeding freely in the course of a few years. During the past year nearly

Mahogany.

2,000 plants were raised from seed produced at Calcutta and Barrackpore in the spring of 1872, and about 500 seeds were got in 1873. About 1,000 layers of mahogany have been rooted, and though these will probably never be of use for timber, they are likely to seed much sooner than seedling plants. Dr. Henderson has tried to raise plants from cuttings, but although these make shoots, and some appear to root, most of them die after a time. Mahogany seed stands carriage so badly, that our only hope of raising large plantations of it is to find out some locality in India where it will seed freely; and with this view a large quantity of young plants has been lately distributed for plantation to jail gardens in various parts of Bengal.

The climate and soil of the Calcutta gardens are unsuitable for so

Hill garden in Sikkim.

many plants, which it is desirable to introduce into India, that for some years a small branch nursery garden has been kept up at a colder climate in the Sikkim cinchona plantations. A number of plants of the European or Spanish sweet chestnut have been raised, and it is hoped that many are now ready for distribution. Coffee is also being tried, and succeeds well; many tea planters already grow it for home use, but it is not likely to pay so well as tea. The Lieutenant-Governor is inclined to think that we should have a regular Government garden in the Sikkim Hills for the cultivation of trees especially.

A decided progress has been effected in the cinchona planta-

Cinchona cultivation.

tions in Sikkim. The disease concerning which Mr. McIvor, of the Nilgiri plantations, expressed such gloomy anticipations, appears to be doing little (if any) damage, and the older trees which were most affected by it have grown vigorously. The Lieutenant-Governor inspected the plantations when at Darjeeling, and found them in a satisfactory condition. When His Honor saw them the year before last, he at once noticed, without any professional knowledge of his own, that the canker did not seem to kill the trees, but only to affect the particular branch attacked,—fresh and vigorous shoots coming out below; and the result of his late inspection and Dr. Henderson's report, has proved this to be now quite clear. Even when the main stem is affected with canker and is cut down, new shoots come up more vigorous than before.

The Lieutenant-Governor found the plantations without doubt very flourishing in all the places where the soil is favorable to the cultivation, but the appearance of the garden, as a whole, is *patchy*, some parts being favorable to the growth, and some not. The young

plants grown from seed seem very healthy. The Lieutenant-Governor also visited the garden of the Darjeeling Cinchona Association, the older portion of which is very good indeed and seems likely to repay the proprietors for their trouble and outlay. His Honor has no doubt that the experimental cultivation of cinchona should be continued both in these hills and in several other places in our moist eastern districts ; but he doubts if it is desirable to extend too much the area of the Government plantations at Rungbee, as, owing to the variable quality of the soil and plantations it is doubtful whether it will prove remunerative in the hands of Government. The Rungbee valley, however, still unquestionably contains much land suitable for cinchona, and of this some of the best pieces have already been carefully selected for future planting. Experiments in the effect of various kinds of manure have been begun with the view of discovering a means of increasing the quantity of alkaloids in the bark.

The budget allotment for the past year was Rs. 55,618, but the expenditure amounted only to Rs. 50,363. About 5,000 pounds of bark were sent for sale to London, but as yet no account-sales have been received. Up to the present time only a nominal revenue has been got from these plantations. A regular return may, however, soon be hoped for, as a good deal of bark will be available from trees which require to be thinned out. With a view of utilising this, and of working out

the whole subject of the quinology of Sikkim-grown cinchona, a practical chemist has been selected in England, who will soon enter on his duties at Rungbee.

During the year 433,000 seedlings of *C. succirubra* (red bark) and 95,000 of *C. calisaya* (yellow bark) have been planted out. This gives a grand total of more than two millions of trees in permanent plantation, covering an area of 1,500 acres. The seed beds and nurseries are also well stocked, so that farther extensions can if necessary be carried out.

The attempts to introduce ipecacuanha into India, which have been alluded to in last year's and previous reports, are among the most interesting experiments in acclimatization that have been made. The history of the attempts is instructive, and shows how difficult it is to carry out such an experiment rapidly ; nearly eight years having now been occupied in getting up a lot of stock plants, and up to the end of December 1872 we had only about 3,000 altogether, half of them minute cuttings. During the current year, however, a rapid stride has been taken in advance. By the 31st of March we had 7,000 plants, and by the end of October they had increased to 23,000. Success would appear to be at last fairly pronounced, and in the course of the next year we may expect to see a small permanent plantation definitely started. Dr. Henderson has lately gained much experience regarding this valuable plant, and he states his opinion that it will now be proved to be a hardy plant, and that in fact hitherto its progress has been checked by over-tenderness. Although it has been found more difficult to propagate by cuttings than cinchona, he doubts if this will continue to be

the case when we have replaced our delicately reared stock by a number of large, strong plants reared in the open air, and producing vigorous shoots.

From leaves it is now being propagated even in Calcutta very easily, and Dr. Henderson never saw any plant grow more readily from fragments of root; in fact every fragment, even if only the size of a pin's head, almost certainly becomes a plant if the parent is in good condition and making vigorous growth. Some plants were placed in March last in the open air in the Calcutta gardens, fully exposed to the sun, and they survived the hot season, which was unusually severe, and are still alive. The cuttings propagated in these gardens last January are now some of them as strong and healthy as the Rungbee cuttings of the same age, and the Superintendent believes that if they had a rich vegetable soil, instead of stiff clay, they would thrive in Calcutta as well as in their native country. At the same time there is no doubt that the plant grows better in shade, and Mr. Gammie, who has made experiments with different degrees of shade at Rungbee, has found that the more they are shaded from direct sun-light, the faster they grow and the more healthy they look. The Lieutenant-Governor has desired that the varieties and species which succeed best in the open air may be very carefully watched.

Experiments in Carolina rice seed were carried on in 1872 much as usual; and were not altogether barren of result. Out of the 107 cases reported, 32 are said to have been successful, 62 doubtful, and 13 wholly unsuccessful. Many of the doubtful cases, however, were very nearly failures. In some of the successful cases it was established that Carolina rice yields more than one crop from the same stalk. For Carolina rice cultivation an artificial supply of water is necessary, and instructions have now been issued that the seed should be sown on our canals and duly irrigated. Carolina rice is much more highly priced in the market than ordinary rice, and it may be that with command of water we shall be able to realize from the cultivation of Carolina rice much that is now sunk on canals.

The Lieutenant-Governor has always been anxious to get some agricultural statistics, in which we are so sadly deficient, and which are notably wanted with reference to the great irrigation works which we have undertaken. But he has felt that he must be moderate in the demands which he makes from all districts, and for the present has confined his arrangements for very detailed agricultural statistics to four specimen districts in different parts of the country, in which special establishments have been organized for the purpose. The districts of Beerbhoom, Jessore, Shahabad, and Rungpore, were selected, and with the permission of the Government of India a

Four special Deputy Collectors appointed to the four specimen districts of Beerbhoom, Jessore, Shahabad, and Rungpore.

Deputy Collector, with an establishment, was deputed in each of these districts in the cold weather of 1872-73 to carry out His Honor's inquiries.

Instructions were issued for the guidance of these officers. Great

General instructions issued.

caution was enjoined in regard to measurements, as an exact measurement might raise all kinds of local questions between landlord and tenant, and it was pointed out that for statistical purposes anything like a field measurement should never be attempted unless it be on Government estates or others very peculiarly situated. If there was any general measurement of considerable areas, it was only to be a rough measurement of blocks. If the Deputy Collector could get from the putwarees, gomastahs, and others, the cultivated area as set down in the rent rolls, it would probably be enough to measure the uncultivated areas in blocks, distinguishing the culturable and unculturable lands that might be really productive for grazing purposes. The grazing capacity of the districts was to be a principal subject of inquiry, and whether the people bred cattle enough for their own consumption, and imported or exported stock. As respects the area occupied by different crops, the Deputy Collector was directed to take specimen areas as fair samples of different parts of the country; when circumstances favored, he might get a rough measurement of the crops in a few villages; but generally he should make up an approximately accurate statement by going about the fields and checking as he best could the statements given him. An active and intelligent man setting himself down in a group of eight or ten villages would, it was pointed out, soon be able to give a rough but fairly accurate statement of the proportions in which the various crops are cultivated in them. Rents, average produce, &c., he was directed to ascertain as best he could; all would depend on his method, tact, and intelligence. Beyond the figured statements, the Lieutenant-Governor hoped also to have for each selected district a report showing the modes and results of agriculture and stock-keeping; size and tenure of farms; condition and habits of the people; in fact everything that regarded agriculture, cess, and produce; statistics and other information regarding trades and manufactures; rates of wages and hire. The prices of produce, &c., were to be carefully noted and reported on.

The great thing, it was added, would be to enlist the zemindars and people on the side of Government, showing them that it was not the intention to pry into their affairs, or to measure their lands with any ulterior object beyond the general knowledge of the country which may enable Government to do what it can for their welfare.

The report of Baboo Ram Sunkur Sen, the Deputy Collector appointed to the district of Jessore, upon the sub-divisions Jhenidah and

Magoorah, has been received and published by Government. It is not too much to say that this report is extremely satisfactory and most creditable to its compiler. It has already been circulated as a Government selection. The Baboo is now engaged in the south of the district in making similar inquiries to those he has already recorded in the north and east.

The Beerbhoom report has been ably compiled and reproduced by Mr. Geoghegan, the late Collector, from the information supplied him by

On Beerbhoom.

the Native Deputy Collector, who is unacquainted with English. The

Deputy Collector was, however, unfortunately left very much without assistance or guidance in his inquiries (for which Mr. Geoghegan was not responsible), and was not himself, like Baboo Ram Shunkur, a man capable of conceiving and making out a plan of systematic inquiry into the statistical and economic facts which His Honor desired to obtain. The Beerbhoom report is useful and good, but not nearly equal to the valuable little volume on the sub-divisions of Jessore. Further inquiries are still under progress in the district. The reports on the districts of Shahabad and Kungpore have not yet been received by Government.

At the same time such agricultural statistics as were available have been collected in other quarters.

Miscellaneous inquiries.

Towards wards' estates and Government estates the Lieutenant-Governor looks much for an accurate knowledge of agricultural facts in the different parts of the country, and exertions have been made specially in the districts of Behar and Northern Bengal to supplement our information. Returns showing the rates of rent for the different sorts of crops and soils have been submitted from all the districts in Bengal. Reports of much interest on particular agricultural products have been called for and received. Our knowledge of the cotton crops in Bengal and Behar was out of date. During the

Cotton.

year valuable information has been furnished of the mode of cultivation among the hills of the Eastern Frontier. In some districts of Behar and the west there appears to be a peculiar cultivation of cotton that ripens in May. In the Beerbhoom jail garden some cotton, grown from the seed of a tree famous among the natives, was found to have produced an extraordinary yield. It is possible that districts which have not produced the ordinary Indian staple in large quantities may be fitted for foreign varieties. It is hoped that some important facts may also be learnt from Orissa, where the cotton crop is sold in the cold weather, and there is a great probability of the produce being benefited by irrigation. Safflower was made a

Safflower.

subject of special investigation. This dye is largely exported from the Dacca division, where the cultivation of the plant is of importance, and, with jute, has done much to raise the welfare of the ryots in Eastern Bengal. An inquiry into tobacco trade and cultivation has recently been set on foot in accordance with

Tobacco.

the instructions of the Government of India.

In June 1872 a complete report, with statistics, upon the present position and apparent prospects of tea culture in Bengal, was called for

Tea.

by the Supreme Government, and resulted in the collection of a mass of useful and practical information, which has now been republished in the form of a Government selection. The whole is prefaced by a note, written by Mr. J. W. Edgar, c.s.i., an officer who has had great practical experience of the subject, which gives an admirable *résumé* of the history of tea planting and its present prospects; and it has been submitted to the Government of India with the opinion of his Government.

A special inquiry has also been instituted during the year into the production of and trade in jute—our

Special inquiry into the production of and trade in jute.

greatest agricultural commercial staple.

Information on the subject was sadly needed. The fibre or fibres commonly called jute are called by the natives by various names, some of which are also applied to other fibres. The Lieutenant-Governor had been shown on the ground by competent persons two very distinct plants, each of which was asserted to be *Koshiah*, the most specific term for jute; and he could not discover whether the whole of the jute of Eastern Bengal came from the same plant as what was called the *desee* or country jute of the districts about Calcutta; in fact, whether the jute of commerce was the product of one plant or of two or more plants. He had seen it asserted in one report that jute was an export from Bengal to Orissa, and in another that it was an import from Orissa to Bengal. He had been told by very competent men that the quality of the jute brought to market was deteriorating, owing to reckless extension of cultivation in lands not fitted for the purpose; by others, that it was not deteriorating at all. Be that as it may, the question to what extent jute might be extended to new fields, to new districts, or to new provinces (as Assam and Burmah), and how far our soils will bear long cropping with it, was one of enormous importance. Mr. Halsey, the Officiating Commissioner of Cotton and Commerce, had pointed out that the Americans were actively prosecuting the experimental growth of jute in various parts of their country, while we as a Government were doing nothing to extend it. Of almost equal importance was the question whether the quality of the fibre could be improved by careful preparation, and what were the best processes for its preparation. The necessities of the jute trade must have a very great influence on all our plans for roads, railways, and canals.

The special points that commended themselves to the Lieutenant-Governor for inquiry were—

- (1) The present production, including the districts and tracts where it is grown; the plant or plants and varieties of plants grown for jute; the soil and situation used in each part; the mode and cost of growing; the rotation practised; the quantity produced; the effect of various climates and conditions.
- (2) The extent to which jute cultivation has increased, and may be increased; the nature of the soils and climates in which it may grow; the degree to which soils are exhausted by it, and the degree in which they may be renewed by rotation, flooding or manure; the general prospects of the future production of the article.
- (3) The preparation of the fibre for the market; the present modes, and the improvements that might be effected in such modes.
- (4) The jute trade; the quantities exported from each district; the lines and modes of export; through what hands it passes, &c.

To elucidate these matters, the Lieutenant-Governor associated a European gentleman, who was Appointment of a Commission. thoroughly well acquainted with the jute trade, Mr. Hamilton Anstruther (whose untimely death, while employed in the Commission, His Honor has much deplored) and a native Deputy Collector, Baboo Hem Chunder Kerr, and desired them to visit some of the principal jute districts, to collect, collate, and sift the information they could obtain from local officers, and to furnish the Government with a report on the whole subject, giving a jute survey and a jute map of these provinces, and explaining all the points above-mentioned and as many others as occurred to them, so far as the information at their command enabled them to do so.

The death of Mr. Anstruther has much interfered with and retarded the inquiry, but the report of the remaining Commissioner is shortly expected.

The Lieutenant-Governor has been desirous of establishing an Economic Museum for the collection of economic, vegetable and other products of these provinces. We have already a great General Museum nearly completed, but it seems very proper that we should also have an Economic Museum for purposes of practicability. A locality and a building for the museum have already been selected at the corner of Dalhousie Square, and the necessary arrangements for establishing the museum are being carried out. It will be opened immediately.

CHAPTER XIV.

FORESTS.

TOWARDS the end of the year 1872 Dr. Schlich was posted to Bengal as Conservator of Forests; this officer has been most indefatigable in visiting and reporting upon all the principal forest tracts, in conferring with the local officers, in organizing establishments, and in framing practical instructions for the guidance of his subordinates. The following paragraphs are taken mainly from Dr. Schlich's reports, and the orders passed by Government thereon.

Appointment of Dr. Schlich.

Inspection of the Sunderbuns.

The forests of the Western Sunderbuns (the forest clad mud banks which, permeated by channels and lagunes, lie between the Bay of Bengal and the cultivated lands of the Ganges Delta) have during the year under report been explored with care by Mr. Home, the Deputy Conservator. It was known that the Sunderbuns supplied firewood and petty timbers to Calcutta and the Delta districts of Bengal at a very cheap rate, and it was believed that the supply was almost inexhaustible; but it was not known what amount of valuable timber there might be in the less accessible places; how far the forests and the larger timbers reproduced themselves; or whether it would be possible to derive any revenue from the State's seigniorial rights in the produce of these forests. Mr. Home travelled in and out among the salt-water channels of the Sunderbuns for some weeks; he saw the wood-cutters at their work and ascertained how their trade was carried on; and he effected valuation surveys of selected tracts in several parts of the Jessore and 24-Pergunnahs Sunderbuns. He was prevented from carrying his inspections into the eastern Sunderbuns by a strike among his boatmen and foresters. The misfortune which caused the strike is so characteristic of the incidents which sometimes befall a forest officer on inspection duty, that Mr. Home's words describing it may be quoted here; he wrote: "The last day's work in the forests was on the 21st April, when one of the coolies was carried off by a tiger under the following circumstances:— I was returning from the boat with the coolies after midday meal, and close to the end of the line there were three old soondree windfalls of from 6 to 10 feet girth, the largest I had seen lying across it. The first was about 14, and the second about six yards from, and the third actually at the end of the line we had cut that morning, beyond which was impenetrable jungle, so dense that it was impossible for a man to

make his way into: in fact, we could not see a couple of yards into it in any direction. I had measured the first windfall, and was stooping down measuring the second, all the coolies having remained behind me up to this, when one of them, Rajab Ali, walked on in front. I heard a movement in that direction, and simultaneously a cry and rush on the part of the coolies behind me, and on looking up could just see the tiger dragging the cooly down behind the log at the end of the line and vanish into the undergrowth on the left, without a sound being heard except the crushing of the jungle. The whole affair did not appear to last half a minute, and when I looked round again the remaining coolies were well away in the direction of the boat. I returned to the spot afterwards with my private servants and some of the boatmen, and could plainly discern a beaten track under the undergrowth leading into the jungle on both sides of the line, crossing it just behind the windfall, where the tiger would appear to have been crouching, waiting for the first of us that reached it. After this episode the remaining coolies refused again to land on any of the Sunderbuns forest blocks."

The Sunderbuns forests cover an area of 3,108 square miles, and they consist of "dense, and in almost every case impenetrable, undergrowth of from 6 to 12 feet high of goran (*Ceriops Roxburghiana*), mixed with seedlings and saplings of larger trees. Over this undergrowth a more or less thick growth of mature trees is scattered, and the whole is frequently intermixed with heavy creepers, which in many cases attain a girth of 10 to 15 inches, crushing down the young trees on which they rest. In some parts clumps of hartal, a palm, which attains occasionally a height of 16 to 20 feet, form the undergrowth.

"The trees, it appears, do not attain a great size, five feet girth being exceptional, and the maximum height being 50 feet. Most or all the trees are used for firewood, and many for building and other purposes. The most important of these is soondree (*Heretiera Littoralis*), a very light, scented, durable, and tough wood. It is cut in lengths from 8 to 35 feet, and used for beams, buggy shafts, planks, boat-building, paddles, posts, and furniture—occasionally for masts and rudders. This tree is found of good size in the compartments east of the Arpungassee, which forms the boundary between the 24-Pergunnahs and Jessore, whereas only trees of stunted growth are found west of that river."

The forests examined by Mr. Home contain, of the several best kinds of trees,—

Mature trees	...	...	5 per acre.
Middle-sized trees	...	...	177 "
Saplings	...	...	890 "

It appeared to be clear, both from the look of the forests and from the statements of the wood-cutters, that the Sunderbun forests reproduced themselves in from ten to twenty years. One-twentieth of the forest area would yield about 700,000 tons of firewood and petty timber per annum, or more than would supply all the requirements of Calcutta and the Delta districts, and therefore the Sunderbuns forest might be trusted to supply the wants of the country without any

interference. The only question which remained for inquiry was the abundance and reproduction of the soondree tree, which was comparatively scarce in the western, but was said to be plentiful in the eastern Sunderbuns, into which Mr. Home had not yet penetrated. This season he will complete his inspection of these forests, and will exhaust the facts regarding the soondree timber.

There was one other question connected with the Sunderbuns which was considered during the year, and that was the possibility of obtaining Revenue from Sunderbuns forests. some Government revenue from the produce of these forests which supply a great market like Calcutta. The Port Canning Company had for many months farmed the lease of these forests, and had gained a large revenue therefrom; but their agents had so harried the people that a special inquiry was made and the lease was cancelled. The Deputy Conservator and Conservator suggested a plan of raising a net revenue of about Rs. 1,50,000 by a system of permits and preventive stations, under which a tax of Rs. 1½ or 2 per hundred maunds might be raised on all forest produce leaving the Sunderbuns. The scheme involved the establishment of twenty or thirty preventive stations on the Sunderbuns rivers and of preventive boats which would be constantly patrolling the channels. The Lieutenant-Governor, after full consideration, was unable to accept the scheme; his orders were to the following effect:—"A similar proposal, but on a somewhat smaller scale, was laid before Sir W. Grey in 1869-70, but was not approved. Sir George Campbell must now finally negative the scheme for raising a forest revenue from the Sunderbuns in any such way as is now suggested. He believes that any such scheme would involve very great harassment of the people as in the days of the Canning Company's monopoly (to which Mr. Home adverts); that it would cause great expense for establishments with very doubtful revenue results; and that there would be very great risk of corruption and oppression if we were to spread a low-paid preventive establishment of this kind all over the Sunderbuns rivers and channels."

The only other explorations made during the year of forests hitherto unexplored were in the Chittagong forests. The Assistant Conservator inspected the forests on the banks of the Htursa, the Sungoo, the Koladyne, the Llama, and the Matamoree rivers. Owing to the extreme density of the jungle with its creepers and undergrowth, he did not effect his survey with much accuracy. But his impression was that owing to unrestricted felling and *jooming* (that is, cutting and burning the jungles for migratory cultivation) there was no large supply of big trees near the streams down which timbers and forest produce was floated; and he reported his apprehension that without some conservancy and systematic reproduction the Chittagong forests could not be expected to continue their present annual yield of—

2,500 tons of big timber of the better kinds.

8,800 tons of inferior and petty timbers.

As yet conservancy measures in Chittagong have not gone beyond levying tolls on all forest produce coming down the rivers and beginning some small plantation arrangements. Eventually it will

perhaps be best to close periodically the forests on certain rivers, and so to work the Chittagong forests in some sort of rough rotation.

Dr. Schlich submitted to Government valuable reports regarding his inspections of the Darjeeling, Bhootan Dooars, Assam, and Chota

Other inspections of forests.

Nagpore forests. These reports will form valuable groundwork for forest administration in future years; but as these forests had been all explored before, it is unnecessary to summarise those reports here. One very important point which had been specially referred to him he

Sál trees in Chota Nagpore.

cleared up, namely, whether sál (*shorea robusta*) would grow to a large size on the Chota Nagpore plateau. Dr. Schlich reported that "the forests of sál consist throughout of shoots from old stumps, which are constantly cut over as soon as they are fit for local purposes. Moreover, the people burn almost nothing but young sál shoots a few inches in circumference. In some places on tracts of limited extent the shoots are allowed to reach a somewhat larger girth, and whenever such is the case they grow up into promising young trees; but even in these cases they fall under the axe before they reach a girth of 3 feet."

He had, however, "come across a small number of really large sál trees which prove what excellent timber may be produced if certain tracts are protected against cutting." He instanced one small patch of sál trees near a village which contained 36 well grown trees with an average of 46 cubic feet of timber a-piece; and other isolated trees of six feet girth which had been preserved near villages. His view was that "it rests entirely with us to produce large sál timber in the Hazareebaugh district."

Dr. Schlich reported also specially upon the planted teak which were

Teak trees in Behar.

known to exist in different parts of the Patna division. He observed and measured some twenty-seven large teak trees in the districts of Patna, Shahabad, and Gya; he believed them to be about 70 years of age; he found their average yield to be 24½ cubic feet of timber, and he ascertained the breaking strength of a sample of Shahabad teak to be 16 per cent. greater than that of Moulmein teak. The principal drawback to the trees he saw was the absence of straight boles, some of the older trees divided close to the ground; but Dr. Schlich considered that this inclination would be overcome if teak was raised in closed plantations.

Steady systematic work was begun this year in the forest reserves of the Cooch Behar Division. The

Forest reserves.

tracts of grass jungle within the reserves are being eliminated, and a thorough inspection and record of the reserves has been begun acre by acre. A reserve, for instance, in the Darjeeling terai, between the Teesta and Mahanuddee rivers, was found to contain per square mile—

537 mature timber trees over six feet in girth,

2,624 timber trees of from three feet to six feet in girth, besides very large numbers of saplings. The trees reckoned in the above survey were sál, chhalownee, saj, sítal, toon, katoos, sissoo, khair, and India-rubber. The sál trees were by far the most numerous; of mature India-rubber trees there was only one to the square mile. In the

Western Dooars of the Julpigoree district a small reserve of khair (*acacia catechu*) and sissou (*dalbergia sisso*) forest was demarcated and mapped. The reserves of the Darjeeling temperate forests, stretching from 4,000 to 8,000 feet above the sea, have not yet been carefully examined, nor has any working plan been framed for their management.

In the Assam division much progress has been made in selecting, demarcating, and mapping reserves. In different parts of the Kamroop and Nowgong district five lowland reserves, aggregating 49 square miles, have been demarcated; on all these tracts *sál* is the prevailing tree, but there is some little *poma* (*cedrela toona*) and *sam* (*artocarpus chaplasha*). On the hills above Nowgong has been demarcated a reserve of dense evergreen forest containing the regular Assam trees, such as the *nahor* (*mesua ferrea*), the *poma*, the *sam*, the *jamu* (*camphora glandulefera*), and other useful timber trees. On the confines of the Naga Hills and Sebsaugor districts the Nambor reserve of 100 square miles has been demarcated, containing mixed, plain and hill forest, of which the better kinds of timber are the *ajhar* (*lagerstrœmia reginæ*), *nahor*, *poma*, and *sam*. Reserves have still to be selected in Sebsaugor district; in the Luckimpore district, nine-tenths of which is forest, no forest reserves will be made. Great care has been taken that the establishment of these reserves shall not inconvenience or trench upon the rights of the surrounding villagers, who have always taken, without hindrance, any forest produce they required for domestic use, and for whom there are all over Assam very ample supplies in the open Government forests.

The timber operations of the Forest Department during the year have been small; little or no timber felling has been done, and the efforts of the

Forest Department have been confined to getting into depôts timber felled in past years, and to selling off old stocks of timber that has been deteriorating. 1,100 *sál* logs, 200 logs of temperate forest trees, and about

In Darjeeling.

300 smaller pieces, were sold off during the year. The prices fetched by the Darjeeling timber were extremely small, barely $1\frac{1}{2}$ annas per cubic foot, and did not cover the cost of bringing the timber into depôt; yet the logs were of magnolia, chestnut, and oak, the best timber trees in the temperate forests. It is said that the native dealers much prefer to buy standing trees, which they can fell and square for themselves. The prices, however, improved at the later monthly auctions, which must be continued, as the timber felled some years ago is fast spoiling in the forest. The auction sales of *sál*

In the Dooars.

logs in the Dooar forests were more successful; the timber fetched about 11 annas per cubic foot all round, yielding a net surplus over and above all expenses of $3\frac{1}{2}$ annas per cubic foot. The experiment made during the year with *sál* timber in Lower Assam was also successful; a small number of logs were brought

In Lower Assam.

to depôt near Gowhatty and fetched 15 annas per cubic foot, yielding a net surplus of $6\frac{1}{2}$ annas per cubic foot. The experiment of felling a certain number of big logs in the evergreen forests

of Upper Assam and floating them down the rivers to market, was concluded, and 474 logs were thus sold during the year; among them were nahor, ajhar, and others of the best timbers of the Upper Assam hill forests. On the whole transaction there was a loss of Rs. 2,800, and Dr. Schlich reports that for the present in Assam "the price of timber other than sál is too low to make the working by departmental agency remunerative." It is, however, to be observed that this particular experiment was not carried out in a very workmanlike manner, as it occupied four years; possibly a well organized experiment carried through in a single season might show more favorable results.

The timber forests of Bengal everywhere yield a large yearly supply of canoes, which are of the greatest possible use to the river-going population of these provinces. Wherever big trees remain there canoe-outters are found; on every river from the Runjeet in Sikkim all round Assam down to the Kurnafóleo in Chittagong they fell the trees, hollow them where they fall, and slide them down the hill side into the nearest stream. The favourite tree for canoes is sál; but in Upper Assam the ajhar, the gunseroi, and other evergreen timbers, make excellent canoes. On the Darjeeling rivers a royalty of Rs. 10 a log is paid by canoe-outters. Two men in one month's work can make a large canoe which will fetch Rs. 50 to 80 in the plains below. In one reach of the Runjeet the Lieutenant-Governor saw last season nearly a hundred canoes ready to be floated over the rapids with the first freshes; some of these canoes were forty feet long and quite three feet in beam. Occasionally these canoe-outters, when they cross our border into Bhootan, or get in among the frontier tribes, cause difficulties; but generally they are industrious, harmless set of men, who do a valuable service to the community in out-of-the-way forests.

There is no accurate record of the timber cut for private purposes under permits except for the Cooch Behar Division, where 5,228 pieces were cut, on which a revenue of Rs. 6,714 was realized. About 250 logs of magnolia, chesnut, challownee, and toon, cut in the Darjeeling forests under permit, yielded a revenue averaging over Rs. 10 per log. In the Dooars the revenue averaged under 12 annas per tree felled under permit. The timber taken out of the Chittagong forests under permits came to 2,164 tons, as against 1,578 tons on the preceding year, but in these forests the permit holders cut where and how they like, whereas in the Darjeeling forests they can only cut under the restrictions and supervision of the Forest Department.

The whole quantity of timber taken out of the Bengal forests seems very small for so great a population. But it must be remembered that for ordinary native requirements petty timbers only are wanted, and that teak and other timber for Calcutta comes either from Burmah or Australia, while sál logs and planks, for the Dacca, Kosee. and Gunduck boat builders, come from the Nepal forests. The forests of Assam and Cooch Behar are for the most part so difficult of access, that Burmah teak can certainly undersell the woods of Upper Assam in the Dacca market, and can very nearly undersell sál logs from the Kamroop or Dooar forests.

Bengal timber sources.

In the Cooch Behar Division there are two plantations in the temperate forests 5,000 feet above the sea; on both of these the natural forest was cleared before the seedlings were put in. Neither of them have turned out well, and little or nothing is now being expended on them. Two very small experimental plantations of teak in the Dooars have been unsuccessful, and two small blocks of India-rubber plantation in the grass jungle of the Darjeeling terai are also unsuccessful. The plantation on the Bamunpookree spur is, however, so far doing well; it was begun in 1868, and in the successful part of the plantation the young trees are healthy; thus—

Seedlings of 1868.—	67	per cent.	still alive,	33	per cent.	dead.
„ 1871.—	83	„	„	17	„	„
„ 1872.—	73	„	„	27	„	„

The greater part of the plantation is teak, but sissoo and toon seedlings are now being put down between the teak saplings. It seems to be clear that the soil, rainfall, and climate of Bamunpookree, are favorable for the growth of teak and other timber. Sundry useful reforms have been effected this year by Dr. Schlich in the management of the plantation, which is now being extended as rapidly as means permit. There have been, however, signs in several of our young teak plantations some of which have caused some uneasiness to the Conservator, and the question whether Bengal is suitable for the growth of teak timber is not yet solved. Twenty acres of the plantation are being planted out with India-rubber seedling and cuttings, of which we have great hopes.

The plantations in Assam have been hitherto carried on mainly with

Plantations in Assam.

a view to ascertaining whether the teak tree could be grown to advantage in Assam. Teak trees of about 35 to 40 years of age are now growing in the stations of Gowhaty and Debrooghur; these trees have certainly grown to a large size, but the stems of the trees are neither straight nor long, though they are of considerable girth. The teak plantations are situate, one on the Kulsee river in Lower Assam, and one at Makoom on the Dehing river in Upper Assam. Regarding these plantations Dr. Schlich reports that on the Kulsee plantation, which was begun in July 1873, the young seedlings, which had been sown direct, were young and vigorous, but the transplants were much inferior. "On the Makoom plantation, begun in 1869, the plants and young trees in the whole of the four acres are," he writes, "evidently growing very fast; those in the four-year-old plantation being up to 33 feet high, and in the two-year-old block up to 16 feet, but there are evidently signs of unhealthiness. Numerous trees are dying off by decaying just

The teak tree in Assam.

where they leave the ground. A four-year-old tree found lying on the ground had decayed right through; the wood from one foot above the ground upwards was perfectly sound and healthy without any trace of insects having attacked it, whereas it had rotted away a few inches above and below the surface."

Dr. Schlich further observes: "The rainfall in Upper Assam amounts to 117 inches, which is not more, or perhaps less even, than in some of the Burmah teak localities; but at the same time the temperature

in the former place is considerably lower, which two circumstances combined produce in Upper Assam a cold dampness that appears to be a bar to the thriving of teak.

"The rainfall at Gowhatty is only 63 inches, or hardly more than half that of Debrooghur, and the temperature is three degrees higher, taking the annual mean, and four degrees taking that of the four coldest months. The result is that teak has up to the present not shown any signs that the climate of Lower Assam interferes with its vitality. * * * * Teak, growing very fast in its youth, shows as a rule very soon what class of timber it is likely to produce, and I think that a decision can be arrived at by the time the Kulsee plantation of last year has become five years' old, but not until then."

The views of Dr. Schlich have been approved by Government, and it has been directed that the Kulsi plantation be extended as rapidly as possible, that a part of the plantation be laid down with the more valuable Assam timber trees, namely, toon, sam, and sissoo. A considerable area near the Kulsee is also being prepared for planting rubber. The Forest Department reckon that rubber plantations should, after ten or fifteen years, yield an annual revenue of Rs. 20 per acre, and the Lieutenant-Governor has expressed his opinion that the most valuable and most paying forest operations we can undertake in Assam will be the preparation of considerable areas of rubber plantation.

An impression has lately been gaining ground that we may with very great advantage apply ourselves to forming India-rubber plantations.

In last year's report reference was made to the India-rubber revenue of Assam, and to the difficulties surrounding that question.

Dr. Schlich writes: "The most important and most difficult question connected with the management of the Assam forests is how to deal with caoutchouc. There are three species of India-rubber trees found in Assam from which the caoutchouc is derived, namely:—

- Ficus elastica*,
- „ *laccifera*,
- „ *obtusifolia*.

The two last species are found in small numbers only, and they yield much less rubber, especially *obtusifolia* than *ficus elastica*. The following remarks refer therefore to the latter only. The trees are found, as mentioned above, scattered over the greater portion of Assam, but more especially in the dense evergreen damp forests near the foot of the Himalayas, in the Luckimpore and Naga Hill districts, and particularly in the territories of the so-called independent tribes. They grow in the plains as well as in the lower hills into fine large trees, but the latter, it appears to me, are perhaps more congenial to their habits. What the number or quantity of trees may be is quite unknown, as they are so much scattered, the best localities possessing scarcely more than 20 trees per square mile, and the greater portion of the forests much less. The trees grow to a very large size, covering an acre and more each when full grown. The quantity of rubber obtained from a full-sized tree varies according to a variety of circumstances, but it appears that as much as

two maunds have been obtained from one tree. The average per full sized tree and per annum can, however, not be put down at more than one-fifth of a maund, equal in value to from Rs. 10 to 12.

"The trees are apparently far more numerous in the forests beyond British boundary than in those within the latter, and this causes the chief difficulties in advising a method of management. The system hitherto followed consisted of selling the right to collect rubber within certain limits. The purchasers of these rights assumed at the same time the exclusive right of buying up the foreign rubber imported into their mehals until the lucrativeness of the transaction attracted numerous speculators, who very soon found out that the right as regarding the foreign rubber was merely assumed. They set to work and bought foreign rubber in opposition to the Government lessees, who caused the rubber to be attached, brought cases in the courts, and in fine the difficulties in dealing with the subject became so complicated, and political complications with the hill tribes so imminent, that the right to collect rubber within British territory was not sold at all in 1873."

Dr. Schlich estimates the rubber exports from Assam to have amounted of late to—

7,500 maunds in 1870.	21,000 maunds in 1872.
12,000 ,, in 1871.	11,000 ,, in 1873.

The falling off in the last year was due to the closure of the rubber forests of Luckimpore, mainly with the view of preventing frontier complications. The value of this trade must be great, inasmuch as

Rubber yield.

the price of rubber in Calcutta ranges from Rs. 45 to Rs. 80 per maund,

according to its purity. The importance of a due administration of the rubber revenue may be estimated from the fact that a European dealer of substance in Upper Assam offered to pay one lakh of rupees a year for the monopoly of rubber in all the Luckimpore forests for three years. The Government could not accept the offer, because its acceptance would involve the lessees having direct relations with the border tribes who usually bring rubber into market. The Commissioner of Assam proposes to establish a Government monopoly of rubber, whereby a Government officer shall buy all rubber brought into depôt and sell it periodically by auction or otherwise. The Frontier Regulation under the Act of 33 Victoria empowers the Government to make arrangements of this kind. The general principle of the Commissioner's proposals has been approved by Government, but the details of its working have not yet been settled.

The Darjeeling forests and the Cachar forests also yield a considerable amount of rubber; the estimated yield of the former is about 700 maunds a year. The Darjeeling rubber was for one year collected by the Forest Department itself, and the rubber so brought to Calcutta was so much purer and cleaner than ordinary rubber, that it fetched nearly 40 per cent. more than the ordinary market price. Next year the

Darjeeling and Cachar rubber.

whole rubber of the Government forests in Darjeeling will be collected through the Forest Department, and it is expected that a yearly revenue of

Rs. 12,000 will be realized therefrom. For Cachar no working plan for working the rubber forests has yet been framed. But whenever rubber is collected under the Forest Department, every effort will be made to regulate the process, and so to restrict the tapping as to spare the lives of the trees, and give each tree a period of rest, and also so as to keep the juice clear of impurities and to prepare it in the best way on the spot. Whatever may be done, the difficulty will always remain that India rubber trees are scattered over the forests at long intervals; and until we have regular plantations of rubber trees, economical collection of juice on the most approved system will not be possible. It is hoped therefore that plantations of the different caoutchouc-yielding trees will soon be formed.

There is one important source of forest revenue in Assam

Soom forests.

which remains to be mentioned, and that is the soom tree, which supports

the moonga silk-worm of Assam. Dr. Schlich writes of the soom forests and of the silk derived therefrom thus: "Silk is manufactured in Assam from several different worms which feed on a variety of trees. The latter are usually artificially raised for the purpose with the exception of the soom tree (*Michilus odoratissima*) in Middle and Upper Assam, on which the moonga worm (*Anthoræa assama*?) feeds. The area occupied by the natural soom forest is estimated by Mr. Mann to comprise some 300 square miles. The Commissioner of Assam computes the area at 53 square miles, of which about 28 square miles are assessed, yielding an annual revenue of Rs. 27,875. The outturn of silk is estimated at 101,940 lb, and the number of people employed in the manufacture as 43,800. It appears, however, that Colonel Hopkinson's estimate does not contain the areas in the Luckhimpore district, which, according to Mr. Mann, amount to about 200 square miles. At any rate the area made use of at present is less than one-fifth of the area available, and until the silk manufacture begins to increase very largely, I do not consider any professional interference on the part of the Forest Department called for. The revenue is collected by the regular revenue authorities and credited under land revenue."

The Government has since agreed that the soom forests should be carefully examined by the Forest Department, in view to the possible formation of soom reserves. The peculiarity of the soom tree is that it grows in isolated patches, often far distant from each other, scattered over the plains forest; but these patches, where they occur, consist almost entirely of soom trees.

In any review of the financial results of the Bengal Forest Department,

Financial results of the year.

it must be remembered that the people of the forest tracts of Bengal

enjoy the free use of Government forests, subject to a restriction in regard to a few "reserved" kinds of trees. On this point Dr. Schlich writes: "It is a recognised principle over all the forest divisions of Bengal that the people inside and immediately around the open forests shall obtain their domestic requirements of forest produce free of charge; it naturally follows that the sales of timber and fuel must be limited, and consequently the receipts under these headings are not likely to rise to any considerable amount, if no exceptional circumstances, as the

construction of railways, happen. On the other hand, many of the forests are capable of yielding large returns from minor forest produce, and in this manner the revenue is likely to rise in future years."

Still, notwithstanding these obstacles to large increases of revenue, the forest work of the year shows a net surplus of Rs. 39,986, after allowing for the difference in value between the stocks at the beginning and end of the year. The totals of receipts and expenditure were as follows:—

RECEIPTS.

	Rs.
Sale of timber brought to dépôt by Government agency ...	24,845
" of firewood and charcoal, removed by purchasers ...	6,504
Permit fees, rent from squatters, &c., (includes civil officer's collections)	1,09,333
Grazing dues and fisheries	710
Sales of fruits, babool pods, India-rubber, &c. ...	8,233
Fines and forfeitures	79
Miscellaneous receipts	146
Total for 1872-73 ...	1,49,851
Total for 1871-72 ...	1,39,089

EXPENDITURE.

	Rs.
Conservancy and working	28,526
Establishments, &c.	71,090
Total for 1872-73 ...	99,616
Total for 1871-72 ...	1,08,339

There has thus been a larger revenue, a smaller expenditure, and a much larger net surplus than in preceding years. The largest item of revenue is Rs 61,400, the yield of the tolls on Chittagong rivers, and much of the forest revenue of Bengal would be or is raised by the ordinary revenue officers without the co-operation of the Forest Department.

In the Statistical Summary has been given some account of the tracts where wild elephants are caught; and it has been stated in a previous chapter that the frontier regulation under the Act of 33 Victoria secures to the State full rights in wild elephants, and empowers Government to decide how, when, and by whom, they shall be captured. It remains now only to notice the action taken during the year under report.

In Luckimpore.

The Luokimpore elephant grounds in Upper Assam, which are the largest and most important in Bengal, have been divided into seventeen clearly defined tracts (called *paongs*). The right to hunt in each of these *paongs* for a season is put up to auction, and the sale fetched this year over Rs. 10,000. Of the seventeen, three are in the border land which is under political control only; former lessees of these *paongs* had in past years

obtained the help of the border tribes (the Kampteas and the Singphos) in their hunting, and have paid to them a quasi-tribute of one elephant in every four caught. The claims of these tribes will for the present be met by a grant to them of one-fourth of the rent of the *paongs* in respect of which they used to enjoy this quasi-tribute. The conditions of the hunting license are that no elephant shall be destroyed for its tusk; that hunting with the noose (a practice which breaks up herds and scatters elephants) is not to be attempted; that the license is liable to cancellation if its holder or any of his agents comes into collision with border tribes; that besides the rent a royalty of Rs. 100 shall be paid on every elephant caught, and that Government shall have the right to as many of the new caught elephants as it requires at prices ranging from Rs. 300 to Rs. 500, according to their height. A commissariat officer skilled in elephants has been deputed to Assam to watch the interests of Government and to select animals for Government from the newly-caught elephants. The present is the first year of the new system, and it remains to be seen how it will work. The Deputy Commissioner will, it is proposed, have under him one or more native officers to look after the elephant hunters and to help the commissariat officer in securing elephants for Government purposes.

Licenses to hunt in the seven elephant tracts (*paongs*) of the Durrung have also been put up to auction subject to the same conditions. Of

In Durrung and the Naga Hills.

the three tracts into which the elephant grounds of the Naga Hills were divided, one is very close to certain border tribes who are practically under no British control; and no license to hunt in this tract has been granted. The value of the other two tracts in which hunting is to be allowed is not yet fully known, but the conditions of license described above will be enforced in the Naga Hills as elsewhere.

Wild elephants are also caught in the plain forests at the foot of the Darjeeling Hills, in the forests of the Bhootan Dooars, and in the forests

Elephants in the Cooch Behar Division.

below the Garo Hills. In the interior of the Garo Hills elephants are very abundant. Until the expedition of last year introduced order and British authority, no elephant-catchers dared enter the independent part of the hills. It has been arranged that licenses to catch elephants in the Garo Hills district shall be granted subject to the conditions prescribed for Assam, only one hunting establishment being licensed for each tract in the year. As regards the tracts in the interior of the Garo Hills, the Lieutenant-Governor did not consider it expedient for the present to attempt a Government kheddah therein, nor did he think it advisable to let private parties into the interior of the Garo Hills, as we know comparatively little of the country and of the people. Three or four years hence, when roads or paths have been made through the hills, and we have established relations with the people, a kheddah may be tried; but it seems best to leave the elephants and their haunts for the present alone. They will not run away, and they will multiply. In the forest below Darjeeling, and in the Bhootan Dooars, elephants have been hunted with the noose, and the herds are much scattered. Henceforward no one is to be licensed to hunt otherwise than after the kheddah method, that is, by making a large enclosure into which a whole

herd is driven at once; this style of hunting requires capital, experience, and considerable number of tame elephants. If no one comes forward to take a hunting license on these terms, elephant-catching in the Dooars will cease for a year or two, the herd will get together, and hunting after the kheddah fashion will again be lucrative.

A large kheddah establishment is maintained by the Commissariat Department in Eastern Bengal; they hunt in the Chittagong jungles, where elephants much abound, but no account of their operations during last season has yet been received.

During the season 1872-73 a small kheddah was maintained in the Orissa hill country by Captain Hunter.

Elephant kheddah in Orissa hills.

He caught 23 elephants: out of which one died; one was presented to the Rajah of Hurdole, who had assisted the kheddah operations; seven under-sized elephants were sold at an average price of Rs. 650 each, and the fourteen full-sized animals in good condition were made over to the Commissariat Department for Government use. Each of this fourteen cost the Government, according to Captain Hunter's estimate, Rs. 633. This kheddah is being continued during the present year. In the far western jungles of Chota Nagpore, on the confines of Mundlah, the Rajah Bindessuree, c.s.r., is allowed to hunt in his own estates, and he caught three or four elephants during the year.

CHAPTER XV.

MANUFACTURES AND MINES, QUARRIES, ETC.

A CONNECTED account of the principal manufactures in Bengal having been already briefly furnished in Chapter I of the general report, it is only necessary to state here the facts for the present year.

The indigo and silk manufactures yielded favorable outturns in the past year 1872. The indigo season was said to be the best ever known, but the large supply of the dye reduced the prices of the market. The present season of 1873 has not been more than an average crop.

The most remarkable manufacturing feature of the present time is, however, the great development in the neighbourhood of Calcutta of large power mills for the spinning and weaving of jute and gunny-bags in establishments of a European character under European management. The natives show great aptitude for working in mills, and the neighbourhood of Calcutta has now become a remarkable focus of this industry. There are in the district of the 24-Pergunnahs very large jute mills in the village of Barnagore, north of Calcutta, and at Gouripore in the sub-division of Baraset. The Barnagore mills employ seventeen European assistants and some 4,700 natives, and manufacture 16,000 tons of jute, more or less, into gunny bags in the course of the year. The number of bags turned out is from nine to ten millions, of which about 75 per cent. are exported by sea. The Gouripore mills employ six Europeans and more than a thousand natives, and manufacture annually about three millions gunny bags. In the weaving department the employees are paid as highly as from eleven annas to a rupee a day. Many women and boys are also employed in the simpler processes. There is also a very large jute factory at Fort Gloster, fifteen miles down the Hooghly and on the Howrah side of the river. There are fresh jute mills now being erected near this locality at Budge-Budge.

There are two jute mills in the sub-division of Serampore—one at Rishra, about two miles south of the sub-divisional head-quarters, belonging to the “Calcutta Jute Mills Company, Limited,” and the other at Serampore itself, belonging to the “India Jute Company, Limited.” A third mill is also in course of erection at Chapdani, nearly opposite Pulta Ghaut. The mill at Rishra is now being enlarged; it now

contains 200 looms, and when the alterations are completed, will contain 300. The Serampore mill has 100 looms. The Rishra mill employs 7 Europeans and more than 1,500 natives. The Serampore mill employs more than 1,000 workmen.

The large jute mill at Serajunge, the great emporium of the jute trade in Eastern Bengal, consumes a lakh of maunds of jute annually.

The success of these mills, as evinced by the advertised dividends and price of shares, is very remarkable; the shares are all at a premium, and new mills are constantly started by new companies in different localities. The last project which has been set on foot, while this report is passing through the press, is the jute mills at Seebpore.

The Lieutenant-Governor has been favoured, through the courtesy of the manager of the Gouripore mills, with a short account of the processes through which jute passes before being submitted to the action of machinery. The first process is described as "batching," which consists in laying out the jute in handfuls lengthwise on the floor, placed in layers, and over every second layer or so sprinkling a little oil and water. After a considerable quantity is heaped up in this way, it is allowed to lie for a few hours, until slightly heated, and it is then taken to the softening machine, where the hard ends are bruised by heavy rollers. From the softener it passes to the card, where it is broken up into tow (*i.e.*, the long fibre is shortened, not by cutting, but by a sort of tearing action). It then passes over a series of machines whose object is to straighten the fibre, make it smooth and level, so that the yarn when spun may be smooth and of equal thickness throughout. In the spinning and winding departments, men, women, and boys, are employed, but principally boys, on an average daily pay of about 3 annas and 9 pie. In the cloth finishing and sewing departments men and women are employed, whose average daily pay is 5 annas 5 pie. The finishing department consists of calendering, measuring, sack-cutting, and packing. In the weaving department only men are employed, and their average salary in the Gouripore mills is 11 annas. There are at present, with the exception of the Government works in the Alipore Central Jail, no mills for the manufacture of the jute fabric in either Calcutta or the immediate suburbs. Many are said to be in course of establishment or contemplation.

The outturn of the manufacture is practically confined to gunny bags and to a small quantity of gunny cloth. The bags are to some extent sold for local use, but the great bulk are exported. The total number of pieces of gunnies and gunny cloth exported from Calcutta during the year 1872-73 was no less than 32,767,930, valued at Rs. 83,07,629. The bulk of this was exported to Bombay (12 million pieces), Madras, Chittagong, Burmah, the Straits, Batavia, and Australia.

There are many jute screw-houses and warehouses in Calcutta and the suburbs. In the suburbs particularly their numbers are rapidly increasing. The principal suburban jute screws, with the exception of the Brunton's Patent Press at Baliaghata, are situated at Cossipore, near the banks of the Hooghly. This locality offers peculiar facilities for the trade from its proximity to the Hooghly and the Canal. The Eastern Bengal Railway Company have constructed a line of railway connecting the Sealdah terminus with the river-bank.

The tendency to establish cotton mills about Calcutta has also been marked during the past year, though it has not been carried to such an extent as in the case of jute mills. There are now two well established cotton mills at Boureah and Ghosrey, and a third is under course of erection at Budge-Budge. The mills at Boureah and Ghosrey turn out yarn and cotton thread for local use, and each employ 250 or 300 persons.

MINES AND QUARRIES.

Coal statistics.

The total outturn of Bengal coal mines at intervals during the last fifteen years has been as follows :—

			Maunds.	Tons.
1858	..	..	6,162,319	293,443
1861	..	..	7,785,085	370,718
1864	..	..	9,032,405	430,114
1867	..	..	11,847,178	476,841
1868	..	..	13,465,829	564,933
1869	..	..	13,236,563	485,390
1870	..	..	13,140,783	431,828
1871	..	..	10,896,317	399,531
1872	..	..	8,793,927	322,443

On the other hand the imports of coal for the five past years to the port of Calcutta have been :—

			Tons.
1868-69	..	..	54,461
1869-70	..	..	41,272
1870-71	..	..	64,000
1871-72	..	..	88,221
1872-73	..	..	48,714

It will be seen from these figures that since the opening of the Suez Canal in 1869, there has been a falling off of 200,000 tons in the out-put of Indian coal, and an increase up to the past year in the imports of coal from England. During the past year, however, the imports have very much fallen off, in consequence, doubtless, of the excessive price at home. It has been usual for the steam vessels by the Suez Canal not only to bring out their own coal as well for the return home as for the voyage to Calcutta, but in many instances to hold a surplus which is sold to the Calcutta market. A large number of vessels also bring out coal as ballast. The Hooghly steam-tugs, as was observed in last year's report, used yearly to consume about 200,000 tons of Bengal coal, but now take little, as the great increase in the steamer trade in the port has very largely reduced the towing business. Altogether the Indian coal trade has been in a condition of depression, and it is said that out of ten of the collieries belonging to the largest coal company in Bengal, no less than six have been temporarily closed owing to the impossibility of finding a market for the large quantities of coal already raised and lying unsaleable at them. In England, where 100,000,000 tons of coal are annually raised, it is difficult to meet the demand; in Bengal, where the outturn has been

reduced to 322,000 tons, it is difficult to find demand for the small quantity that is raised. At the same time it may be expected that the high price of English coal now ruling will shortly increase the demand for Indian coal, and already indications are not wanting to show that such is the case. During the last month three ships have taken Bengal coal round from Calcutta to Bombay, charged at 10 rupees per ton at the river-bank, while the freight is ranging from 11 to 13 rupees a ton. Next year's report will probably show that a favorable re-action has to some extent taken place in the prospects of the coal trade.

In the chapter on the physical features of the country a brief account is given of the localities in Bengal where coal is found. The coal companies have confined their operations almost entirely to working in the Western districts. There are, however, great mineral virgin resources, and notably a wide area of coal *strata* in Assam.

Coal in the Khasi and Jynteah Hills.

The coal in upper Assam is of a very superior quality, and used to supply the Government steamers till leases were given to parties, who stopped the supply. These leases are, however, falling in. The Lieutenant-Governor has given special attention to the mineral resources which are known to exist in the Khasi Hills. Dr. Oldham says that the

The Lakadong coal mines.

Lakadong Hill contains more coal in one place than any of the other sites; that it is of good quality, gives out great heat, is a first-rate gas coal, and is only 5 to 7 per cent. below good English coal. Dr. Oldham (whose estimates on matters of this kind are rarely too sanguine) estimates that there must be 1,500,000 tons of coal in the Lakadong field. About 5,000 tons appear to have been raised from this mine from 1848 to 1856. The seams or out-crops range from one-half to twelve feet thick, and can be worked mostly from the surface.

Lakadong is within six miles of Borghat, a village on an affluent of the Soorma, and boats of 500 maunds burden can go up to Borghat all the year round. The Lakadong out-crops, however, is said to be 2,294 feet above the level of the sea, and it must therefore be nearly 2,000 feet above the level of the river at Borghat. Under all these circumstances the Lieutenant-Governor considered that, looking to the quantity and quality of the Lakadong coal, to the fact that no private individual has yet come forward who can be relied upon to work the mines thoroughly, and to the demand which may arise for good clear-burning coal at the Khasi lime kilns and on the Cachar tea gardens, as well as for steamers, Government ought to incur some expenditure in improving the road from the mines to Borghat, and in putting out and carrying to Chuttuck a certain quantity of coal as an experiment.

Arrangements have accordingly been sanctioned for making a large scale survey of the out-crops of coal in the neighbourhood of Lakadong, showing the altitude above the sea and the thickness of each seam; for preparing a scheme for getting the coal down the hill and making a road which might be turned into a tramway from the foot of the hills to Borghat; and for excavating and delivering to the Marine Department coal shed at Chuttuck 3,000 maunds of Lakadong coal, to be used either on Government or private steamers.

Important out-crops of coal have also been observed farther west in the newly-acquired portions of the Garo Hills, and they seem, by their position and accessibility from the plains, to give much promise of future usefulness. The importance of undertaking a geological survey of the Garo Hills has been represented. A survey to determine the line in which an Eastern Bengal Railway might be carried through or into these hills is more wanted even than a regular survey, and His Honor has urged that some geological examination of the hills should be made without delay.

The Lieutenant-Governor during the year strongly urged upon the Government of India the necessity of a geological and mineral survey of the foot of the hills in the Darjeeling Terai and in the Bhootan Doocars, and the Supreme Government has now directed the geological survey to make the necessary arrangements. There have been many indications of minerals in these tracts, and the survey for the Northern Bengal Railway gives an enormously increased importance to this subject, and renders a mineral survey most desirable. Coal, no doubt, exists in large quantities; copper is, and has been, worked for long, and its analysis shows it to be of excellent quality; cobalt and manganese have been found in the Darjeeling Hills, and limestone in the Bhootan Doocars; the last a thing very greatly wanted in Bengal.

An application has been made to obtain the necessary mining tools from England, and it is believed that the arrangements for the survey will all be completed by the cold season of the present year.

CHAPTER XVI.

TRADE.

Decrease in foreign and interportal trade from Calcutta.

THE value of the total (foreign and interportal) trade of Calcutta in 1872-73 was very much lower than in the previous year; thus—

	Value of exports from Calcutta.	Value of imports to Calcutta.	Total.
	£	£	£
1871-72 ...	32,771,152	21,365,677	54,136,829
1872-73 ...	29,908,937	17,986,994	47,895,931

The decrease of imports is mainly under the head of bullion and specie; the imports of gold, silver, and money, were £3,251,806 less than they were in the previous year, while there was a net decrease of £126,877 on the value of other merchandize imports. There was a net decrease of £2,862,215 in the value of all exports; the decrease being very large in the exports of—

Opium,
Oil-seeds,
Cotton.

The falling off in the bullion imports is said to have been due to the condition of the exchange market, under which bankers found it more convenient to buy India Office bills than to import bullion or specie. The total drawings of the Secretary of State paid in Calcutta during the year under review were Rs. 10,81,62,000, which falls short by one million of the whole difference between the estimated values of exports and imports.

Taking first the exports of the year from Calcutta to places beyond British India, we find the largest fluctuations in the following articles :—

FOREIGN EXPORTS.

		Value of exports in the year.			
		1871-72.	1872-73.		
		£	£	£	
Opium	...	6,852,380	5,613,205	1,239,175	decrease.
Cotton	...	4,086,955	1,779,129	2,257,826	"
Oil-seeds	...	2,009,403	1,111,920	898,483	"
Hides and skins	...	1,862,557	1,815,557	47,000	"
Lac and lacdye	...	239,205	188,175	51,030	"
Safflower & other dyes	...	131,580	110,246	21,334	"

		Value of exports in the year.			
		1871-72.	1872-73.		
		£	£	£	
Jute	...	4,113,943	4,127,943	...	14,000 increase.
Gunny bags	...	114,612	161,419	...	46,807 "
Indigo	...	2,465,186	2,699,420	...	234,234 "
Tea	...	1,448,467	1,567,561	...	119,094 "
Rice	...	1,277,672	1,685,170	...	407,498 "
Sugar	...	146,189	182,456	...	36,266 "
Tobacco	...	7,686	71,695	...	64,059 "
Saltpetre	...	396,676	518,012	...	127,336 "
Raw silk	...	1,060,444	1,236,887	...	170,443 "
India-rubber	...	78,565	143,631	..	65,166 "

The increases and decreases in each article are partially explainable thus:—The opium decrease is due to the shortness of the crop and of the number of chests offered for sale by Government. The very large decrease in the value of cotton exports is due mainly to the comparative cheapness of American cotton in Europe, and the consequently reduced demand for Bengal cotton: the year 1871-72 was a year of very exceptional briskness in the Bengal cotton trade. The fall in the seed trade was due in part to the shortness of the seed crops in the Ganges valley and elsewhere. In the preceding year (1871-72) the value of the seeds export fell off by £835,000, and now it has fallen by £898,483 more. The exports to Great Britain and America, our principal customers for seeds, have fallen off in about equal proportions. The Collector of Customs notes that the rape-seed crop was a failure, and that mineral oils are largely taking the place of rape-seed oil in Europe. This very large and continuous decrease of the trade in an important staple merits some further inquiry, and the Lieutenant-Governor has desired to be furnished with a detailed account of the fluctuations of the particular markets which take less of our seeds, of the sources from whence those markets now draw their supplies, and of any reasons why Indian seeds should have lost ground in the estimation of European and American consumers. The decrease in the exports of hides and of lac is not explained. If any of the decrease in the hides trade is due to the cessation of the cattle disease, which threw so many hides on the market, the decrease will not be matter for regret. The decrease in the safflower trade is said by the authorities of Dacca, in which district safflower is almost exclusively grown, to be due to over-trading and excess European stocks of the preceding year. The Commissioner of Dacca reports that one of the causes for the decline in the trade is the discovery of a cheaper substitute for safflower.

The increase in the estimated value of the jute exports is very small, but the increase in the quantity of jute exports was very large. The growth of the jute trade during the last few years has been as follows :—

In the year—						Exports of jute and jute cuttings from Calcutta in cwt.
1867-68	...	...	...	...	...	2,291,565
1868-69						3,350,626
1869-70						3,350,200
1870-71						3,745,402
1871-72						6,128,545
1872-73						7,061,951

The jute produce of the year under review was so large that the price went down nearly one-half, and as a consequence there has been a reduction in the area sown with jute during the current year. The trade in gunny bags has also increased. Australia and the Straits Settlements have taken more gunny bags, but America took less than in the preceding year. The export of jute and jute cuttings to America was somewhat in excess of the previous years, being 1,242,000 cwt. against 1,000,000 cwt. in the preceding year. It is not known if the manufacture of gunny bags is increasing in America. The indigo export was 119,385 cwt., against 66,929 cwt. in the preceding year; but the out-

turn having been so very large, prices went down considerably, and the increase in the estimated value of the indigo exports was, as shown above, barely ten per cent. The exports of tea, which increased by 4,000,000lb in the preceding year, show a further increase of 516,000lb. The tea crop

of the year under review was short in some districts, or the increase would have been still higher. Great Britain continues to take almost the whole of our teas. The increase in the rice export was 1,341,413 cwt.; the bulk of the increase went to the Mauritius and Great Britain, and the

West Indian Islands took more rice than in previous years. The large export of rice to Java was a new trade, and was due apparently to the partial failure of the crops in that island. With the cessation of the Persian famine a smaller quantity of rice has gone from Calcutta to the Gulf. The increased exports in sugar must have been due mainly to the goodness of the date and other sugar crops in Lower Bengal, for the

up-country sugar yield of the year was low. Almost the whole of the increased exports (23,949 cwt.) went to Great Britain and Persia. Recent inquiries in Jessore have shown that the increase in the export of date sugar to Calcutta has been very great during the last eight or ten years. The tobacco export to Europe is almost a new trade. The

Collector of Customs writes: "This increase has been owing to a trial shipment having been favorably reported on for the German market, which is supplied through London * * * * * From the cheap rate at which Indian tobacco can be laid down in Europe, there are prospects of much further development." If a steady and growing trade in Indian tobacco should be established, it will be a

great advantage to the Indian growers. The increase in the saltpetre exports is satisfactory, as the trade had been dull in the preceding year.

Saltpetre.

The increase occurred chiefly in the exports to America and China, and may serve to counterbalance the somewhat gloomy anticipations that have been made regarding this trade.

FOREIGN IMPORTS.

Among the foreign imports fluctuation has occurred principally in the following items:—

VALUE OF IMPORTS IN THE YEAR.

	1871-72.	1872-73.	
	£	£	
Specie and bullion	4,001,604	1,096,251	*2,905,352 decrease.
Grey cotton goods	6,858,691	6,026,728	826,962 "
White cotton goods	1,410,112	1,628,977	218,865 increase.
Turkey reds	577,285	476,224	101,061 decrease.
Coloured piece-goods	617,340	808,126	190,786 increase.
Cotton twist	973,252	1,020,248	46,996 "
Coal and other fuel	121,387	77,088	44,298 decrease.
Candles	17,015	44,679	27,663 increase.
Spices	64,720	97,453	32,733 "
Fruits	61,301	39,643	21,658 decrease.
Copper	579,609	289,367	290,241 "
Railway materials	210,967	253,848	42,881 increase.
and wood	100,083	16,488	83,600 decrease.

The decrease in the bullion imports has already been noticed; almost the whole decrease occurred in imports from Great Britain and China. The

decrease in grey cotton goods, following on a decrease of £716,635 in the value of imports during the preceding year, is ascribed mainly to the over-trading of the year 1870-71. The trade in twist, coloured goods, and white cotton goods, is recovering from the stagnation of the year 1871-72. The decrease in the import of fuel is due to the rise in prices in England. The fluctuation in the imports of candles, fruits, and spices, is casual, and is not explained. The great falling off in the copper imports is said to be due to the rise of prices in England, to which country the ordinary Indian supplies of copper from Australia were diverted. A new source of supply for copper has been worked during the year under review, namely, Japan, which sent £27,835 worth of copper, as compared with £12,942 worth in the preceding year. The small increase in the import of railway materials followed on a decrease of over half a million sterling in the preceding year. The decrease in the timber imports occurred chiefly in the Australian and British trade. There was an almost corresponding increase in the imports of timber from Moulmein, which is shown under the head of *interportal* as distinguished from *foreign* trade.

On a general review of all the items of the trade of Calcutta, the Lieutenant-Governor feels able to say that the Custom House returns testify that the yield of country produce and the general commerce of the country were fairly good. The only very unfavorable item was the continued large decrease in the export of oil-seeds. The reduction

* NOTE.—This figure differs from that in the first paragraph of this chapter, which contains *interportal* as well as foreign bullion and specie imports.

of imports of piece-goods was, it is believed, merely the natural reaction from the excessive trading of 1870-71.

Of the total value of all the inward and outward trade of Calcutta during the year, 52 per cent. was with Great Britain. In the trade to North America there was a net decrease of £252,421 in value; of this decrease £6,164 were in the imports, which are altogether inconsiderable in value (less than £40,000 in all). The chief items of decrease in exports were indigo, oil-seeds, raw skins, gunny cloths, and gunny bags; while there was a considerable increase in the saltpetre, gums, India-rubbers, and tanned skins trade. Altogether the exports from Calcutta to America fell from a value of £2,247,712 in 1871-72 to £2,013,705 during the year under review.

There has been a net decrease of £114,895 in the Calcutta trade with Australia. The decrease has occurred mainly in the imports of copper, horses, and timber, and there have been small decreases in the value of rice and of miscellaneous exports to Australia. The only noticeable item of increase in the Australian trade is gunny bags, of which Australia took more than double as many as she did in the preceding year.

The Calcutta trade with France has remained stationary; while the trade to China, Holland, Hamburgh, Trieste, Egypt, North America, Australia, South America, the Straits Settlements, and the Arabian and Persian Gulfs, has decreased considerably during the year under review, and the trade with the Mauritius and Italy has increased: thus—

Total value of export and import trade (exclusive of bullion) between Calcutta and the undermentioned places during the year.			
	1871-72.		1872-73.
	£		£
France	1,477,285		1,471,730
China	6,602,862		5,614,844
Holland	244,769		107,671
Hamburgh	65,452		1323
Trieste	643,869		425,690
Egypt	69,342		56,034
North America	2,161,573		1,790,217
Australia	279,348		160,942
South America	134,329		6411
The Straits Settlements	1,549,641		1,307,378
The Arabian and Persian Gulfs	398,440		375,867
Italy	268,448		467,373
The Mauritius	503,034		733,864

France has taken much more raw silk, more shawls, more jute, more hides, and more saltpetre, than in the previous year; but the exports of cotton, seeds, and indigo, have fallen very largely indeed; the net result being that the value of the whole trade was about the same as in the previous year. The decrease in the China trade has occurred chiefly in imports of copper and vermillion, and in exports of opium and rice. The exports of cotton from Calcutta to China had risen in value from £409,491 in 1871-72 to £659,338 during the year under review. The trade with Hamburgh has almost ceased owing to the failure of the rape-seed crop. The falling off in the Trieste trade has been principally in indigo exports (£190,000), cotton exports (£60,000); the exports of hides to Trieste has meanwhile risen by nearly £70,000 in value. The export

of indigo to Egypt almost ceased during the year, and the import of corals from Egypt was very slack. The decrease in the North American trade, the decrease in the import of horses, copper, and timber from Australia, and the increased export of gunnies to Australia, have already been noticed. The decrease in the trade with South America was due entirely to the cessation of the demand for Indian rice in South America. The decrease in the value of trade to the Straits is due to the shortness of the opium supply; the trade in gunnies to Singapore and the imports of black-pepper from Penang increased largely. Nine-tenths of the trade with the Straits is export trade. The export of rice to the Gulf decreased by about £60,000, but as a make-weight the export of indigo went up £35,000. Both these fluctuations are probably due to the cessation of the Persian famine. The large increase in the trade with Italy consists of an increase of £100,000 in the export of raw silk, £56,000 in the hides and skins export, and £12,000 in the indigo export. There was some increase in the imports of salt and of beads from Italy. The increase in the Mauritius trade occurred entirely under the head of rice and other food-grains. More than ninety-nine-hundredths of the trade with the Mauritius is export trade.

Of all the countries with which Calcutta has considerable foreign trade, Great Britain is the only country which sends to India more merchandize than she receives. In 1872-73 Great Britain sent to Calcutta £14,362,000 worth of merchandize, and received from Calcutta £10,735,000. To all other countries Calcutta sent about £19,265,000 worth, and received back from those countries about £3,624,000 worth of goods. The excess in value of the Calcutta export over its import trade with some of the principal countries of the world may be seen from the subjoined figures:—

Country with which the trade occurs.	VALUE OF CALCUTTA TRADE OF THE YEAR 1872-73 EXCLUSIVE OF BULLION.	
	Exports.	Imports.
	£	£
China	5,442,357	172,487
North America	1,756,061	84,565
Franco	1,284,601	187,293
The Straits Settlements	1,080,839	125,639
Australia	111,552	49,390
The Mauritius	732,342	1522
Italy	407,647	59,726
Tricste	396,076	29,614
Arabian and Persian Gulfs	295,156	80,611
Holland	107,677	Nil.

The number of steamers, other vessels, and native craft, entering Calcutta during the last three years, compares as follows:—

Vessels entering the port.		1870-71.	1871-72.	1872-73.
Vessels of all kinds...	{ Number	1,082	1,109	1,118
	{ Tonnage	890,675	978,693	992,211
Steamers	{ Number		290	343
	{ Tonnage		279,692	347,180
Native craft	{ Number		169	161
	{ Tonnage		15,324	13,299
Suez Canal steamers, included in the first	{ Number	56		91
two totals	{ Tonnage	56,353	109,175	121,584

It is evident that the average tonnage of the vessels coming to this port continues to increase, though not at so rapid a rate as in the years immediately after the opening of the Suez Canal.

At the port of Chittagong there
was a large increase of trade and
customs duty during the year 1872-73 :
thus—

INTERPORTAL TRADE.
Sea-borne trade from Chittagong.

	1871-72	1872-73.
Total customs collections, exclusive of salt duty ...	18,990	35,891
Estimated value of exports ...	278,795	452,749
„ „ imports ...	121,010	184,829
„ „ total trade ...	399,805	637,578
Square-rigged vessels entering the port {	Number ...	219
	Tonnage ...	267
	67,234	102,767

It would seem that in the foregoing figures, taken from the Board's report, the value of the salt imported has been taken at the invoice price plus the duty, instead of being taken at the price in bond; a deduction of Rs. 7,25,000 must therefore be made from the estimated value of the Chittagong trade if the estimate is to be framed in the same way as for Calcutta and other ports.

The dutiable export of rice from Chittagong is mostly to the Mauritius and Ceylon. There is also a very considerable and rising trade with Rangoon in timber and earth-oil, which last commodity is coming into general use among the people of Chittagong. From Akyab, also, where salt is cheap, a considerable trade in salt-fish is setting to Chittagong. Chittagong still draws its supplies of piece-goods and other European commodities, except salt, from Calcutta.

The custom duty realized at the Orissa ports is still extremely small, barely Rs. 10,000 a year, which is realized on small consignments of rice to, and of cocoanuts, coir, and cowries from, the Laccadives and Maldives, or upon an occasional package of European stores from Pondicherry. In 1872-73 the total quantity of rice exported from the Orissa ports to places outside India was only 24,000 maunds. There is, however, a considerable export of rice from Orissa to other Indian ports. When the canal system of Orissa shall be complete, we may expect to see a large export of rice from Orissa to foreign and to Indian ports. The coasting trade between Calcutta and the Orissa ports is largely increasing. The ports and the establishments at False Point, Balasore, Chandballee, as well as the communications between these ports and the interior, have recently been much improved, and are receiving still further attention. The Government of India has recently sanctioned proposals for relieving the Orissa ports from the strict letter of some of the customs departmental rules, which hampered the coasting trade. The working of these ports will be a very great benefit to Orissa and its people, though for some years to come their trade can hardly have much effect upon the customs revenue. The principal exports will be rice for Calcutta and other Indian markets.

In last year's report the arrangements made for registering the trade on the Ganges past Sahebgunge were explained, and the traffic returns for the first six months of 1872 were reviewed. It was stated that Sahebgunge had been selected as the place of registry, because nearly all its great tributaries entered the Ganges above Sahebgunge, which was above the point where the most westerly of the Ganges mouths leaves the main stream for the sea. Sahebgunge, again, is situated on a rocky headland, directly under which the deep stream of the Ganges passes.

INTERNAL TRADE.

Traffic on the Ganges.

During the rainy season of 1872, while the river was in flood, the convenience of Sahebgunge as a registering station was further proved. For six weeks during the height of the freshes a second boat channel close to the left bank of river was used, and special arrangements had to be made for registering the boats taking that channel. During the last week of August and the whole of September, about one-quarter of the boats passing up and down the river took the new channel on the left bank; but by the beginning of October the river had fallen, the left bank channel was impassable, and all the traffic returned to the usual deep channel under Sahebgunge. The traffic returns for the second-half of the year 1872 have since been completed.

About 43,000 boats in all passed Sahebgunge during the year,—at the rate of about 100 per diem during the first-half of the year, and about 140 per diem during the second-half. During the first six months the up-stream traffic was larger and heavier than the down-stream; but during the second half-year, when the river was in flood, the down-stream traffic was very much the larger.

The average freight of each laden boat was—

Up stream—							Mds.
First-half of the year	...	...	...	...	...	...	320
Second-half of the year	...	...	...	...	...	...	310
Down stream—							
First-half of the year	...	...	...	...	...	...	223
Second-half of the year	...	...	...	...	...	...	364

The two great articles of produce, rice and oil-seeds, which together make up more than half of the whole Ganges traffic, may to some degree cause—at any rate they fall in with—the condition of the river trade. Rice comes into the Bengal markets in December and January, and is despatched up-country for consumption in Behar and Benares during the dry season, when the up-stream traffic is briskest; oil-seeds come into the Behar and Benares markets in April and May, and are despatched to Calcutta for export during July and the rainy season, when the down-stream traffic is the largest. During the whole year only eleven steamers with their flats passed up, and eleven steamers passed down, the river. These steamers all belong to a European Company in Calcutta, and they seem to get very little of the ordinary traffic of the country. They get twice as much cargo on their up-stream as they do on their down-stream trips. They carry very little of the great staples, such as oil-seeds, rice, and salt; but carry most of the metals and machinery, and much of the miscellaneous European goods which are sent up-country by river. Neither

country boats nor steamers get any of the piece-goods traffic between Calcutta and the Upper Provinces.

The total weight of the cargoes passing Sahebgunge during the year 1872 is shown to have been—

Down-stream Traffic.

				Total cargo in mds.
FIRST HALF-YEAR	...	{ Country boats	...	1,364,930
		{ Steamers	...	35,738
				<hr/> 1,400,668
SECOND HALF-YEAR	...	{ Country boats	...	4,254,636
		{ Steamers	...	50,123
				<hr/> 4,304,809
				<hr/> <hr/> 5,705,447 = 209,200 tons.

Up-stream Traffic.

				Total cargo in mds.
FIRST HALF-YEAR	...	{ Country boats	...	2,372,732
		{ Steamers	...	86,446
				<hr/> 2,459,168
SECOND HALF-YEAR	...	{ Country boats	...	2,435,714
		{ Steamers	...	89,063
				<hr/> 2,525,377
				<hr/> <hr/> 4,984,545 = 182,766 tons.

Down-stream traffic.

The chief staples of the down-stream traffic during the year were—

	Mds.
Wheat	432,000
Oil-seeds	2,580,000
Pulses and gram	448,000
Sugar	545,000
Tobacco	108,000
Saltpetre	823,000
Cotton	77,240

Nearly all the wheat that comes down the river is shipped at marts in the Monghyr and Bhaugulpore districts. Very little wheat comes from the Patna division, and none comes from the North-Western Provinces. Of the pulses, also, more than half is shipped from the Monghyr, Purneah, and Bhaugulpore districts; the rest comes from the districts of the Patna division. Of the oil-seeds—

About one-half, or nearly 1,300,000 maunds, come from the Patna division.
 " three-eighths " 900,000 " " Bhaugulpore division.
 " one-eighth, or over 300,000 " " N. W. Provinces.

The largest shipments of oil-seeds are made from Revelgunge in the Sarun district, at the meeting of the Ghogra and the Ganges; from this mart alone more than 500,000 maunds of oil-seeds were despatched. The next largest oil-seeds mart was Roshra, a comparatively little known place on the Chota Gunduck river in the Durbhanga sub-division of Tirhoot. From Roshra 345,000 maunds of oil-seeds were despatched; while Durbhanga and Somastipore, two other towns in the Tirhoot district, sent about 100,000 maunds between them. From the marts of the Patna division, on the south of the Ganges, comparatively little oil-seed was despatched. Patna sent 200,000 maunds;

but from other places in Patna or Shahabad not more than 30,000 maunds were despatched. More than four-fifths of the oil-seeds passing Sahebgunge was consigned to Calcutta, or to places on the Bhagirutty which feed the Calcutta market.

Out of 545,000 maunds of sugar passing Sahebgunge, more than 400,000 maunds come from the Benares province, mainly from the districts

Sugar. of Ghazee pore and Jounpore; nearly all the rest comes from the districts of Chuprah and Tirhoot. Of this Ganges-borne sugar Calcutta takes little more than one-third, and the rest is consigned for consumption in the Dinage pore, Maldah, Rajshahye, Pubna, and Moorsshedabad districts. Some part of the 130,000 maunds of sugar consigned to places in the Moorsshedabad district may eventually find its way to Calcutta, or it may be re-exported to other districts of western and central Bengal. Tobacco comes mainly from Tirhoot and Purneah, in which districts it is known to grow well near the hills.

Tobacco. Most of the tobacco is consigned to places in the Moorsshedabad district, and a good deal comes to Calcutta. Hardly any tobacco comes from the North-Western Provinces.

River-borne saltpetre comes almost entirely from the Tirhoot and Sarun districts; some little comes from the Monghyr and Bhaugulpore districts. Only 13,000 maunds came from the North-Western Provinces, and 4,000 maunds came down the Ghogra from places in Oudh; Gunduck-Sahebgunge, Chuprah, Durbhanga, Solimpore, Hajee pore, and Poosa, were the chief places of exports for saltpetre. Only 5,000 maunds are shown to have been shipped from Patna or from places in the Patna division south of the Ganges, a result which is somewhat surprising, inasmuch as Patna had been supposed to be the head-quarters of the Behar saltpetre trade. It will be seen in a subsequent chapter of this report that considerable despatches of saltpetre are sent from Patna by rail. Almost all the saltpetre passing Sahebgunge was consigned to Calcutta.

More than three-quarters of the cotton passing Sahebgunge came from Mirzapore; the bulk of it was consigned to places in the Rajshahye division and in Eastern Bengal.

Cotton. The Ganges-borne trade in hides is smaller than might have been expected. The total number of hides and skins (by tale) passing Sahebgunge was about 330,000; more than three-quarters of this amount left the river at Sahebgunge and took to the rail there. A very much larger number came into Calcutta by railway, the explanation probably being that hides cannot bear a long river journey in the damp season without spoiling. More than two-thirds of the whole number came down in the dry season.

Hides. The number of logs, planks, and posts, 43,000 in all, is smaller than might have been expected, seeing that a great part of Western, Central, and Eastern Bengal, draws its supplies of timber from the *sal* forests at the head-waters of the Ghogra, the two Gunducks, and the Koossee.

Timber.

officer in charge of the business, at first somewhat untrustworthy. The Lieutenant-Governor was not aware that so large a share of the oil-seeds exported from Calcutta was grown in the districts of Tirhoot, Sarun, Chumparun, and Gorruckpore; nor that Northern and Eastern Bengal drew such large supplies of sugar from the provinces of Behar and Benares. But these general results of the Sahebgunge registration may be accepted as quite correct, and do not throw any doubt on the approximate accuracy of the Ganges trade returns.

The traffic returns of the Bhagiruttee, the Matabhanga, and of the Calcutta canals, have also been received, but they were not kept in the required shape until the second-half of the year 1872, and therefore the figures for that half-year only are available.

Traffic on other Bengal rivers.

The set of traffic returns are four, namely:—

The Jungypore returns.—These are taken at the toll station at the head of the Bhagiruttee, where that river leaves the Ganges. The tables give the weight of goods each way, their place of shipment and alleged destination. They do not show the traffic of places below the Nuddea toll station, which latter station records the Bhagiruttee traffic at a point about 50 miles above Calcutta and about 80 miles below Jungypore.

The Nuddea returns.—These are taken at the toll station, and show the traffic only of places between Nuddea and Calcutta.

The Matabhanga river returns.—These are taken at the station of Kishengunge on the Matabhanga river, by which route the traffic of north-east and part of Eastern Bengal comes to Calcutta. This route is in more or less direct competition with the Eastern Bengal Railway. The Matabhanga returns show all the marts in Nuddea and the eastern districts in alphabetical order. There is often more than one mart of the same name; and as the districts to which a place belongs is not given, it is not possible to identify each place.

The Calcutta canals' returns.—These returns are taken at toll stations a little outside Calcutta, on the canals which connect the Sunderbuns, Backergunge, parts of Jessore, and the country about the Megna river, with Calcutta. They show any trade which may go by canal from the Sunderbuns or Jessore towards Western Bengal or Behar. The returns of the Calcutta canals do not show the place of shipment or destination of the traffic, but only its general direction.

The Board of Revenue have arranged to have the returns of all these canals and rivers compiled on a uniform plan, whereby the trade of considerable marts only will be shown, the trade of small places in the same district being lumped together. Further returns will show the number of laden and empty boats for goods and passengers passing each way.

Taking the several sets of returns in the above order, we have first the Jungypore returns, which to a great extent exhibit the same down-stream traffic that passes Sahebgunge.

The Jungypore returns of the Bhagiruttee.

Barely 130,000 maunds of goods that pass Jungypore are shipped

from places east of Sahebgunge. The sum of the principal traffic figures of the Jungypore and Sahebgunge stations for the second-half of 1872 compare thus:—

	TRAFFIC PASSING DOWN-STREAM AND REGISTERED AT	
	Sahebgunge. Mds.	Jungypore. Mds.
Total of the half-year	4,254,686	3,577,630
Oil-seeds	2,109,078	1,450,617
Pulses and gram	374,253	743,534
Wheat	333,833	133,050
Saltpetre	236,175	94,042
Total of consignments for Calcutta	3,626,700	3,295,515

It will be seen that in one or other of the returns there has been some confusion between pulses and oil-seeds. If the two items be taken together, the difference between the totals of the two registers is only 200,000 maunds. It is known that places east of the mouth of the Bhagiruttee took about 340,000 maunds of the goods which passed Sahebgunge; deducting this amount, we find the difference between the total traffic for the Hooghly, as registered at Sahebgunge and as registered at Jungypore, is about 330,000 maunds; the Jungypore being less by so much, or by about 10 per cent. This difference is by no means so large as to throw considerable doubt upon the approximate correctness of the returns; for at Jungypore the boatmen pay toll according to their maundage, and may therefore be expected to understate it somewhat, while at Sahebgunge they pay no toll, and have no interest in understating the truth. The difference in the returns of wheat and of saltpetre coming down the river is much larger than can be explained in this way, and one or other of the returns must be very seriously wrong. A comparison which has been made with the Custom House figures would go to show that the Sahebgunge figures are the more correct of the two.

The Nuddea toll station returns show the down-stream traffic of the Bhagiruttee from places below Jungypore. The total of this trade is 215,506 maunds, of which one-third, consisting mainly of pulses, comes from Moorshedabad; nearly another third comes from Cutwa (in the Burdwan district), and consists of rice, pulses, and other cereals.

The up-stream traffic from Calcutta is registered at Nuddea, and to some extent the Nuddea returns ought to agree with the Sahebgunge figures. The total shipments up-stream from Calcutta and Bhudressur (Hooghly district) past Nuddea compare with the same shipments past Sahebgunge thus:—

	UP-STREAM SHIPMENTS DURING THE SECOND-HALF OF 1872 FROM CAL- CUTTA AND BHUDRESSUR, AS REGISTERED AT	
	Sahebgunge. Mds.	Nuddea. Mds.
Total shipments	854,450	1,445,800
Salt shipments	616,129	1,204,800
Shipments of metals	13,556	34,975

The share of the total Calcutta shipments which were recorded at Nuddea as being consigned to places east of Sahebgunge was about

330,000 maunds, and the share of the salt shipment similarly consigned was about 240,000 maunds. Thus the shipments for Behar and the North-Western Provinces, as registered at Nuddea, were 250,000 maunds in excess of the shipments as registered at Sahebgunge; and almost the whole of this excess was in the one item of salt. The excess, it may be added, is uniform for most of the great salt receiving marts. Thus there were shipped for—

Salt shipped from Calcutta and Bhudressur for—	ACCORDING TO THE RETURNS AT	
	Nuddea. Mds.	Sahebgunge. Mds.
Revelgunge	156,075	140,957
Roshra	170,375	128,032
Durbhanga	61,875	46,391
Khageriah (Monghyr)	78,200	39,379
Monghyr	52,250	36,726

The difference seems to be all one way, and to be fairly regular; it may therefore possibly be that the heavier salt traffic sets in during the months of November and December, and that many salt vessels which passed Nuddea before the end of December 1872 did not reach Sahebgunge until January 1873. When a whole year's returns are available for both registering stations, this doubt will be cleared up.

The Matabhanga river returns exhibit the trade between Calcutta and the districts on the Pudda (local name of the Ganges after the Bhagiruttee leaves it) and the Berhampooter rivers and their tributaries. The totals of the Matabhanga trade are for the half-year—

	Mds.
Down-stream traffic	2,325,410
Up-stream traffic	761,702

The principal articles of the down-stream traffic are—

	Mds.
Rice	1,260,587
Jute ...	606,257
Pulses	220,040
Oil-seeds	57,608
Tobacco	12,611
Gunnies	36,537

Of the total traffic 1,945,013 maunds come to Calcutta. The only other marts which receive large shipments from eastern districts by way of the Matabhanga are—

	Mds.
Hanskaloe, which takes	40,241
Chandernagore (or Forasdanga, as it is called in the returns) ...	262,170

This latter mart is said to take 251,370 maunds of rice alone, but it is understood that in reality the bulk of these consignments is made to Bhudressur, which is just south of French territory. There is no doubt that there is a large export of rice from Dinagepore, &c., besides what is shown in these figures, and that a good deal of rice despatched from the Attrai finds its way to districts south of the Ganges, and does not pass the Kissengunge toll station.

The marts which send large shipments down the Matabhanga are—

Serajunge, in Pubna, which sends	...	...	245,649	maunds of jute.
Patiram, in Dinagepore	"	"	115,491	" rice.
Hilee (on the Juboma), in Bogra, which sends			234,598	" "
Koomargunge,	"	"	94,875	" "
Booreedah, "	"	"	163,720	" jute.
Booshee (on the Attrai) in Dinagepore	"	"	16,225	"
Chandgunge, "	"	"	59,000	" rice.
Kallygunge, "	"	"	44,294	"
Chokgopal, "	"	"	42,004	"
Fukeergunge, "	"	"	77,162	"
Jeebun Bazar (on the Kuratee) "	"	"	67,600	"
Gowalparah, "	"	"	41,750	mustard seed.
Foolbaree (on the Jumoon) in Dinagepore	"	"	33,525	"
Rangamuttee, "	"	"	63,350	"
Paglee (on the Attrai) "	"	"	46,050	"
Hurreenarainpore, "	"	"	47,600	"

The Lieutenant-Governor has desired the Commissioners of Rajshahye, Dacca, and Cooch Behar, to give some short notice of such of these marts as belong to their divisions. Serajunge is really the only one of these marts which has more than a local reputation; Hilee has recently become known, because it is to be a station, and has always been held to be an obligatory point on the Northern Bengal Railway. But regarding the rest of the places there is little information available in Calcutta; yet on the list there are places which, like Booreedah, send some thousand tons of jute to Calcutta in the season, and it would clearly be an advantage that the Calcutta public should know something more regarding the great produce marts of Eastern and Northern Bengal.

The two main articles of the up-stream traffic on the Matabhanga were—

Salt from Calcutta	...	Mds.
Miscellaneous from Calcutta	...	460,000
		211,000

The only mart to which any large consignment of up-stream goods was sent is Serajunge, which took 179,000 maunds of salt.

The statements of the trade of the Calcutta canals give no details of the places of destination or shipment, an omission which will be remedied in future returns. The Lieutenant-Governor does not wish details of the trade to and from all the smaller marts, but he wishes to know the transactions of the larger places, and to have the transactions of the smaller places grouped according to districts.

The four returns from the Calcutta canals give—

- (1) The trade from Calcutta to the eastern districts *via* the canals, which amount to 1,179,725 maunds, or 43,256 tons, in all for the half-year. Of this total 924,669 maunds were salt.

- (2) The "trade to Behar and the North-Western Provinces." The precise meaning of this heading is not clear, but possibly the return shows all the trade which goes from the Sunderbuns and the eastern districts to Western Bengal and places on the Hooghly above Calcutta. The total of the traffic shewn in this return is 2,493,200 maunds, or 91,417 tons. Its principal items are—

	Mds.
Rice	597,700
Pulse and other cereals	162,500
Oil-seeds	84,970
Jute	965,100
Miscellaneous	232,700
Firewood	368,500

- (3) The trade from the eastern districts with Calcutta and its environs. The total of this trade is 8,517,635 maunds, or 312,323 tons, for the half-year. More than half of this total, or 4,494,585 maunds, was firewood from the Sunderbuns. Of the rest the chief items were—

	Mds.
Rice ...	1,191,620
Other cereals	260,225
Pulses, &c.	141,400
Oil-seeds	107,700
Jute ...	778,300
Cotton	90,770
Sugar ...	40,600
Hides	254,700
Miscellaneous	994,250

In the absence of information as to the places from which these Calcutta imports come, the figures are less instructive than they might otherwise be.

- (4) The trade "from Behar and the North-Western Provinces" to Calcutta and its environs through the Calcutta canals. The total of this return is 426,140 maunds, out of which 346,460 are shown as "miscellaneous." Without some account of the particular traffic shown in this table, its figures are not very intelligible.

Until the East Indian and Eastern Bengal Railway traffic tables and the river and canal returns for a whole year are available, it will not be possible to review the whole inward and outward trade of Calcutta by railways or by inland waters. Meanwhile some beginning towards ascertaining this trade has been made, and in another half-year or so the river and canal returns ought to be complete. In the chapter of this Report on railways, such information as is available on the subject of railway traffic is furnished. The Lieutenant-Governor has submitted to the Government of India a statement of the traffic returns he would wish to receive and have published for general information regarding the East Indian Railway and Eastern Bengal and Mutlah Railways.

An account of the principal features in the trade and traffic of the interior of Bengal is briefly given in the following paragraphs of this report, which will supplement the figures of the river traffic.

The districts of the Burdwan division have but little to do with commerce in the "grandiose" sense of the word, but they are all more or less

Burdwan. the tributaries or the channels of commerce; and Bhudressur, in Hooghly, is a very large commercial depôt, where the native merchants keep their cargoes as it were out of sight of the Calcutta market, but still within their easy reach. The town of Bhudressur is situated on the west or right bank of the river Hooghly, to the immediate south of French Chandernagore. This mart extends down towards Bidyabatty, Showrafully, and Chatra, as far as Serampore, and the deposited transitory produce to be found in all these depôts must be of very great value. Howrah, as a suburb of Calcutta, seems to come in for but a small share of its commerce, though it is rapidly adding to its jute warehouses and increasing its manufactories. The river face is unfortunately too much pre-occupied by the East Indian Railway Company and by docking companies. The canal from Calcutta to Midnapore promises soon to become the highway of commerce in that direction, and Ghattal is at the present time a remarkable commercial centre for the exports and imports which find their way up the Roopnarain river up to that part of the country, the tidal influence of the river being felt as far as Ghattal, and thus far as it were impregnating the country with the stream of commerce.

Rice is exported from Midnapore and Beerbhoom, but the other districts of the Burdwan division cannot be said to support themselves with this staple. Silk and indigo are exported to Calcutta. Among minor exports, Midnapore has a *specialité* in mats, the value of which, as exported by the low level canal, was Rs. 75,000 during the year. Jute is exported from Hooghly to Calcutta.

In the 24-Pergunnahs an extensive trade is carried on in sugar, rice, jute, timber, and firewood, thatching leaves, shell for lime, honey, and bees-wax, which articles, with the important exceptions of sugar and jute, and also rice to some extent, are brought from the Soonderbuns. The jute trade was particularly brisk last year owing to the high prices which prevailed for a time; but it has since fallen off, owing to the market being glutted with the large crops produced all over the jute districts of Bengal. In Nuddea indigo, cloth, sugar, and brass utensils, are those in which the trade is usually the largest. The minor exports consist of grain, oil-seeds, and chillies. The articles imported are principally salt and piece-goods. Rice is also imported into Nuddea. In Jessore *goor* and sugar manufactured from the produce of the date tree are the principal articles of trade, and next indigo, which of course finds its way to the Calcutta market. There is also a trade in rice and other Soonderbun products, such as wood, reeds, mats, baskets, honey, shell-lime, fish, cocoanuts, and betel-nuts. Besides these exports there are chillies and the betel leaf or *pān*. Morrelgunge, a port lately opened in the Jessore district, appears to have already attracted a fair number of vessels, and a steadily increasing export trade in rice has sprung up there.

Presidency.

The principal marts in the Rajshahye division have been already mentioned in the preceding paragraphs on the river traffic returns. Serajgunge is the principal emporium of the districts of Pubna, Mymensing, part of Bogra, and Rungpore, and Dinagepore. It is the greatest jute market in Bengal. The amount of the jute trade from Serajgunge was estimated at thirty lakhs of rupees in 1871-72. In 1872-73, 1,508,900 maunds of jute were exported by the Eastern Bengal Railway Company's steamers, and it is understood that more than half the jute from the mart leaves in country boats. The total value of the steamer trade from Serajgunge in 1871-72 is stated at Rs. 66,38,525, and about as much was sent by country boats. At all events it is certain that the annual exports from Serajgunge are above a million sterling. From Hilee in the Bograh district it is calculated that nearly 300,000 maunds of rice are exported to Calcutta and the Hooghly district. From Dubchanchia, on the Naga river, there is said to be at least an equal export. Both these marts will be tapped by the proposed Northern Bengal Railway.

The chief articles of exports in this division are jute, silk, indigo, tobacco, hides, sugar, and rice. Rice is exported most largely from Dinagepore: Rungpore, Bograh, and Pubna, are the largest jute-producing tracts. Ganja is supplied from Rajshahye to the whole of the Lower Provinces.

The proposed Northern Bengal line of Railway from the Ganges to Darjeeling, which traverses a portion of Pubna, Rajshahye, Bograh, Dinagepore, and Rungpore, has already been marked out. It will, when carried out, tend more than anything else to develop the resources and trade of these districts. From Rungpore it is this year reported that the yield of rice was considered too good by the ryots, as the prices were thereby kept down. This idea will presumably cease to exist when there are better means of exit for superfluous produce. In Bograh also the Magistrate notes that in Adamdighi, one of the richest rice tracts of the district, a field of rice long over-ripe and deteriorating was still uncut after the middle of February. The districts of this division are ordinarily quite self-supporting in the way of food grains.

The trade of Darjeeling except in tea is at present insignificant.

Cooch Behar.

The main export from the Cooch Behar division is mustard-seed, while there is a considerable import of rice. The exports of jute and tobacco are increasing. Ghee also is sent south in considerable quantities from the Dooars.

Dacca.

The principal exports of the Dacca division are jute, tea, rice, hides, safflower, betel-nuts, oil-seeds, cocconut oil, sugar (coarse *goor*), dried fish, lime, oranges, stick-lac, India rubber, cloths (cotton), and Dacca cheese and soap. Imports are English piece-goods and cotton twist, hardwares, spices, tobacco, ganja, salt, opium, and fermented liquors; cattle, which come from Dinagepore chiefly, and tobacco from Rungpore. The exports are largely in excess of the imports in money value, and vast quantities of silver are paid to the cultivators and petty traders residing in the division, of which a very large proportion is converted into ornaments or is buried and lost to circulation. During the last

year the market value of jute went down about 50 per cent. ; other things much as before. This year safflower has fallen immensely, and there seems to be an unwillingness on the part of some known buyers to touch it at all. Timber sold well last year, the supply not being equal to the demand. The local money market was rather dull, being considerably affected by the fall in the price of jute.

The principal export from Chittagong is rice, of which 2,823,355 maunds, equal to 103,711 tons, were exported by sea last season, against

Chittagong. 1,150,809 maunds in the previous year. The trade is principally in the hands of European merchants, but there are one or two Native firms. The bulk of this rice comes from Tipperah, Noakhally, and the island of Dukhin Shahbazpore. Ghee is said to be exported in considerable quantity from Chittagong to Calcutta. Jute goes entirely to Dacca and Naraingunge *en route* for Calcutta. It is remarked by the Commissioner that the success attained by the ryots of Bodakhal, the richest pergunnah in the Tipperah district, in the production of this staple, excited the emulation of the neighbouring cultivators, and they sacrificed the rice crop to a certain extent in order to cultivate the new staple.

Speaking generally, it may be said that the leading exports from Patna. Behar are oil-seeds, hides, tobacco, saltpetre, sugar, indigo, and opium ; and the imports are rice, cotton, salt, iron, and cloth. The city of Patna is a centre for collection and distribution, and its position on the railway and on the Ganges, just where the Ganges, Gogra, Gunduck, and Soane become united, and where the traffic branches off to Nepaul, gives it in this respect great advantages. The exports are principally to Calcutta. Oil-seeds come from all over the province. Tobacco is largely exported from Tirhoot. Tobacco manufactured, *i.e.* prepared for the hookah with spices, &c., is a speciality of Patna. The export of indigo and opium, if comparatively small in bulk, are enormous in value. The importation of rice into Behar is large, and rice is a principal food crop in Behar, though among the poorer classes, and especially in the district of Sarun, maize and barley are in a great degree the food of the people.

The trade of the Bhaugulpore division is chiefly in the hands of the Bengalis, particularly Calcutta Bengalis ; there are up-country traders also, but their number is proportionately very small.

The Ganges-borne traffic is very large indeed. Nearly all the wheat that comes down the river is supplied at marts in the Monghyr and Bhaugulpore districts. Of the pulses, also, more than one-half is supplied from Monghyr, Purneah, and Bhaugulpore. There is a very large export of oil-seeds also from the division. Rice is now exported westwards much less than formerly. The Purneah rice, however, finds its way both into the Calcutta and up-country markets, and the rice trade of Darjeeling with Purneah has increased. Ghee, or clarified butter, is exported in considerable quantities from this division, particularly from the districts of Monghyr and Bhaugulpore, to Bengal.

Sahibgunge, in the Sonthal Pergunnahs, has of late become a large centre of trade, and has more or less monopolized the trade formerly carried on at Peerpointy and Colgong, in Bhaugulpore. Articles intended for despatch by the railway, and brought in by boats from the neighbouring country, particularly Purneah, are here unladen and transported. Tea from Darjeeling is brought to this place and then sent down by rail.

The sea exports of rice and paddy from Cuttack, Pooree, and Balasore, to foreign countries and British Indian ports, during 1872-73, as obtained from the Collector of Customs in Calcutta, were as follows:—

Whither exported.	CUTTACK.		POOREE.		BALASORE.		TOTAL.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
To foreign countries	8736	11,934	6,286	7,921	8,667½	8,988	23,680½	38,843
To British Indian ports beyond the Bengal presidency ..	91,396	1,30,363	137,050	185,629	185,202½	201,295	414,608½	517,287
Total ...	100,132	142,297	144,236	193,550	193,930	210,283	438,298	546,130

The above figures do not, however, include the exports to Calcutta, or to any other port within the Bengal Presidency. The salt trade in Orissa is also a very large item, involving the employment of capital and a large circulation of money among every class of the population.

In respect of trade and commerce much has been done to open out Orissa in the last few years, and much more will be done as the canals and harbour arrangements are completed. There is good reason for believing that the province is now started on a course of increasing commercial prosperity. The Ooriyas are now much more in connection with the outer world than they were a few years ago. The number of vessels which visited Balasore during 1872-73 was 451, against 394 in 1871-72; and the year under report also shows an increase of about 3½ lakhs of rupees in the value of exports from Cuttack. There is, however, a decrease of about 1½ lakh of rupees in Balasore.

The great trade marts in Chota Nagpore are Gurwah in Palamow, Chattra in Hazareebaugh, Lohardugga, and Jhalda and Rughunathpore in Maunbhoom. Ghee, sunn-hemp, wheat, oil-seeds, pulses, and lac, are exported; the imports are salt, English and country piece-goods, and thread, brass and iron utensils, blankets, tobacco, sugar, and spices, &c.

The principal exports from Assam are tea, rubber, and lac and other gums, silk, and seeds. The tea amounted last year to 14 million pounds weight (175,000 maunds). The export of oil-seeds is very large indeed, and this is a profitable and increasing trade, which may be developed to any extent. A certain supply of cotton, which is cultivated in the hills and

the sub-montane tracts, finds its way into the plains. The traffic in silk is said to be on the decline. The present amount of rubber and lac exported is not known, but it is known that for one district alone a European dealer, who had long been engaged in the rubber trade, offered one lakh of rupees for the monopoly for one year. The bulk of the goods is carried by the River Steamer Companies trading to Assam. The Assamese as a rule are not traders, and the traffic is in the hands of the Marwaree and Dacca merchants. These people have agencies all over the interior, even up to the foot of the hills. Unlike the Assamese, the Khasis are traders; they have all the business in their own hands, and the exports, limestones, potatoes, betel-nut, oranges, &c., and the imports, chiefly rice, tobacco, and salt, of the Khasi and Jynteah Hills, are considerable.

CHAPTER XVII.

ROADS, CANALS, AND OTHER PUBLIC WORKS.

THE entire outlay on public works in Bengal during the year 1872-73 amounted to Rs. 1,25,49,259, as below noted:—

		Rs.	Rs.
1.	Imperial .. { Railway, State ..	1,07,737	
	{ Ditto, Guaranteed ..	1,48,986	
			2,56,723
2.	„ .. Civil and Military works ..		9,65,711
3.	„ .. Irrigation ..		54,84,490
4.	Provincial Proper ..		35,25,036
5.	„ Reserve fund, exclusive of grants-in-aid to districts ..		4,27,726
	{ District Road Works ..	9,92,006	
	{ Grants-in-aid of Municipalities ..	78,130	
6.	Local Funds { Contributions ..	2,46,517	
	{ Several particular local funds ..	1,73,993	
			14,90,646
7.	Tuccavce outlay, i.e. advances for agricultural purposes ..		1,95,794
8.	Local Loans { Hooghly Bridge ..	1,81,104	
	{ Dancoonee Project ..	63,773	
			2,45,577
Total outlay on Public Works in the Province ..			1,25,91,703

PUBLIC WORKS ORDINARY.

Irrigation works and railways being under separate administration, the following remarks refer only to public works classed as “ordinary.”

General remarks.

The progress of the year has been equal to what was anticipated, the expenditure having been very close to the grants, though slightly in excess, the excess being—

	Rs.
For Imperial works	44,741
For Provincial „	11,818

The military buildings at the chief stations in Bengal were at the commencement of the year transferred from the local Government and placed directly under the control of the Inspector-General of Military Works. The only works of this class now under the charge of the general branch of the Public Works are those at small stations.

The establishments of this branch of Public Works have been organized during the year.

The changes of system alluded to in the report of last year were completely introduced during the year, and, as a whole, have been working fairly well. The principal feature of this new organization is that an engineer officer is attached to each of the districts of the province under the Magistrate of the district. The District Engineer has charge of the imperial and provincial works in the district, and if the Road Cess Committees desire it, he has also the charge of all their works and roads. A subordinate establishment is placed under the orders of the District Engineer to undertake the charge and construction of all the works in the district. The initiation of all works rests with the Magistrate, the Heads of Departments, or Road Cess Committees. The District Engineer stands in the position of their professional adviser and executive officer. He furnishes them with any plans, estimates, or any other information they may stand in need of, and carries out works which may be determined on. Superintending Engineers are placed in the position of official inspectors of all works the construction or maintenance of which is entrusted to the different District Engineers in their circle, and they are the professional advisers of the Commissioners. Thus all the works in districts are carried on under the general direction of the civil officers, and under the professional supervision of the Public Works Department.

The new arrangement has, considering it is the first year, worked satisfactorily, though in one or two instances there has been a want of unanimity between the civil officers and those of the Public Works Department; but this has possibly risen through their hardly understanding their relation to each other. This is being clearly laid down, and it is hoped that in future the work will be carried on by civil and engineer officers with harmony.

There has been very great difficulty in getting good men to fill up vacancies in the subordinate establishment of the department. The Presidency College turns out a number of men with sufficient theoretical knowledge, but these men, until they have received some practical training, are useless for the work they have to undertake in the overseer grades of the department.

The budget estimate for Provincial Services included all expenditure for these services from whatsoever source derived, but at the end of the year the Government of India directed that all provincial expenditure other than what was transferred to local Governments on the formation of the provincial service system should be shown separately. The budget was consequently recast into two heads—Provincial Services Proper and Reserve.

The accounts of the various districts have been submitted with punctuality, the arrears being quite exceptional.

The rivers Mahanuddy and Katjoorie at Cuttack began to rise at the end of June 1872, and on the 3rd of

Floods.

July the former was two feet higher than the highest recorded flood in 1855, while the latter was only one foot below the flood of the same year. On this day the floods topped the Ganjam and Pooree roads, and breached the embankments which protect the Calcutta road in its first mile north of the Mahanuddy. This flood caused great anxiety to the residents of Cuttack, and sepoy and prisoners were employed day and night in strengthening the embankments of the Katjoorie. The damage done by the flood was heaviest on the Ganjam and Pooree road, which was breached in many places. No serious damage, however, was done to any of the bridges; all the district roads were more or less damaged; some of the temporary bungalows on the Sonapore road were submerged 6 feet, and as a matter of course tumbled in. The Madhub and Taldundah roads were both breached, and some timber bridges on the Aul road were destroyed.

The Booreebullong river in the Balasore district rose to a greater height in October than it had done in previous years, and the Orissa trunk road had to be cut through to save the Mooniagoorce bridge.

A heavy flood occurred in the Nuddea districts in September last year. The Buggoolah and Bajitpore road was under water in its second, third, and fourth miles, and there was about three feet of water on the first and second miles of the Buggoolah and Baghdah road. The damage to the earthwork on the Kishnaghur and Kissengunj road was very heavy, as the road was breached or cut through in many places. The Gokul khall bridge on the Choadangah and Meherpore road was carried away, and the road itself was breached. This bridge is nearly restored, and will be available for traffic at the commencement of the rains.

Considerable damage was done to the earthwork on the Kishnaghur and Meherpore road; a timber bridge in the fourteenth mile was damaged, and one in the eighteenth mile was destroyed. On the Meherpore and Ganjam road a culvert was washed away, and a timber bridge was destroyed; the other district roads in the vicinity sustained more or less damage.

A heavy gale passed over Tura in the Garo Hills in September, doing serious damage to the buildings there. Balasore was also visited by a storm last year, which did some damage. The buildings at both stations were at once repaired and rendered safe.

Storms.

The damage by fire during the year has been very slight, the school-house at Pooree being the only building which caught fire during the year. A new roof has been put on and the building thoroughly repaired.

Fire.

The following figures show the outlay on the different classes of works :—Imperial, Provincial, and Local.

The expenditure on imperial works during the year has been distributed as follows :—

IMPERIAL WORKS.

				Rs.
Military works	...	...	...	1,24,746
Civil buildings	...	...	...	8,38,035
Miscellaneous public improvements	...	...	...	2,030
Total				9,65,711

Military Works.

The expenditure on military works has been during the year—

				Rs.
Original works	...	...	...	62,071
Repairs	...	...	...	62,675
Total				1,24,746

The original works under this head were in connection with the accommodation and requirements of native troops at outlying stations, and do not call for any special remark.

The expenditure on Imperial civil buildings has been as follows :—

				Rs.
Civil Buildings.	Original works	...	...	6,83,916
	Repairs	...	...	1,54,119
	Total			8,38,035

In addition to the above, a sum of Rs. 2,08,571, from deposits set apart for completion of the Imperial Museum, was expended during the year on that building. The work on this building was, however, slightly delayed owing to the late arrival of iron-work from Europe; the progress made during the year has been considerable. Notwithstanding the cracks alluded to in last year's report, no more serious injury has ensued.

Of the large Imperial buildings in course of construction at the Presidency, the new University was completed during the year, and was handed over to the Senate in March 1873 and used at the ensuing convocation.

Satisfactory progress has also been made on the new Telegraph Office.

A house and premises in Park Street for the Mathematical Instrument Department was purchased during the year at a cost of a lakh of rupees.

Various improvements are being carried out in the Mint, and several post offices and telegraph buildings have been erected in the interior.

PROVINCIAL WORKS.

The total outlay on provincial works has been Rs. 35,25,036, distributed as follows :—

				Rs.
Civil buildings	...	...	...	17,32,893
Communications	...	...	...	17,41,864
Miscellaneous public improvements	...	...	...	50,280
Total				35,25,036

This sum includes the cost of establishments employed on district works.

Civil Buildings.

Under the head of civil buildings there has been an expenditure on—

	Rs.			
Original works	12,31,116
Repairs	5,01,776
Total	17,32,892

The following table shows the outlay on each class of buildings, including Establishment, Tools and Plant, and other charges :—

	Original Works.	Repairs.	Total.
	Rs.	Rs.	Rs.
Jails	3,73,396	1,06,140	4,79,536
Registration	324	...	324
Police	27,384	2,845	30,229
Education	2,41,867	48,064	2,89,935
Medical	34,692	28,214	62,906
Court-houses	4,58,425	1,63,852	6,22,277
Sub-divisional buildings	19,025	3,032	22,057
Excise	6,876	13,274	20,150
Salt	601	16,772	17,373
Customs	3,809	10,858	14,667
Lieutenant-Governor's residence	4,732	10,014	14,746
Offices and Secretariats	19,887	20,387	40,284
Public Works buildings	5,910	10,629	16,539
Circuit-houses	4,917	28,712	33,629
Churches and cemeteries	18,308	29,931	48,239
Botanical gardens	3,336	4,645	7,981
Miscellaneous	7,617	3,470	11,087
Total	12,31,116	5,01,776	17,32,892

In addition to the above a sum of Rs. 31,023 was received as contributions to Educational and other works from committees and individuals, and was distributed as follows :—

	Rs.
Education	10,968
Medical	13,842
Court-houses	533
Churches	5,368
Botanical Garden	307
Total	31,023

The new High Court was completed with the exception of the tower, which is now being finished.

This building was occupied by the High Court in May. Various subsidiary works in connection with the building were completed during the year.

A new building for the Small Cause Court was commenced in August 1872; there were some difficulties to be overcome in getting in the foundation of this building. Good progress has been made on it during the year, and the building ought to be near completion at the end of the official year 1873-74.

The extension of the boundary wall of the Alipore Jail has been completed, and 50 solitary cells had almost been completed at the end of

the year. The works at the Central Jail at Hazareebaugh were pushed

on. At Midnapore the original intention of completing the buildings of the Central Jail with laterite was abandoned, and it was determined to use brick in future, as being more economical both as regards cost and time. The convict labour at this place was employed almost entirely in the brick-fields, the outturn from which was 30 lakhs of bricks. Good progress has been made during the year on the buildings connected with the Central Jail at Bhaugulpore; various lock-ups and other jail buildings have been erected throughout the province.

The old Sailors' Home in Lall Bazaar has been repaired and appropriated for the Police Magistrates' court.

Police.

Rapid progress has been made on the new building for the Presidency College.

Education.

A General and Pilgrim Hospital is being constructed at Cuttack. A portion of the European barracks at Berhampore is being converted into a lunatic asylum. A lunatic asylum is also being erected at Tezapore, in Assam.

Medical.

The chief buildings under this head are the new Small Cause Court at Calcutta, already noticed; a new Court-house for the Magistrate at Rungpore; and a Court-house for the Judge of Midnapore, on all of which satisfactory progress was made during the year.

Court-houses.

COMMUNICATIONS.

Under the head Communications, there has been expended on—

					Rs.
Original works	...	...	...	...	6,85,829
Repairs	...	...	...	...	10,56,235
			Total	...	17,41,864

The following are the most important new works under this head.

Four stone causeways have been constructed over river beds on the road from Calcutta to the Madras Frontier, and a masonry bridge is being constructed over the Julka nulla.

Road from Calcutta to Madras.

A bridge is being constructed across the Sursutty River on the Grand Trunk Road in the Hooghly district. The only work remaining to be finished on the Patna and Gya branch road is the bridge over the Dhurdah River. The masonry work has been pushed on, but the iron-work has to come from Europe.

Grand Trunk Road from Calcutta to North-Western Provinces.

Patna Branch Road.

Satisfactory progress has been made on the 1st section of the new road from Burrakur to Purulia. The Girhidi road, and the continuation of the same line from Barodah to Hazareebaugh, were undertaken with a view of opening out more direct communication between the branch line of the East Indian Railway ending at Girhidi, the Grand Trunk Road, and the Chota Nagpore districts. The works have been pushed on rapidly. The whole of the earthwork and construction of culverts have

Burrakur and Purulia Road.

Girhidi Road.

been completed, and it is expected that the bridges required on the road will be completed during the present year.

The timber bridges on the Ganges and Darjeeling road are being rapidly replaced by iron structures on screw piles. Special repairs and alterations are being carried out on the hill portion of the road, and a first-class timber bridge over the Mahanuddy has been completed.

Ganges and Darjeeling Road.

The earth-work on the Sylhet and Cachar Trunk Road has been almost completed. Eight brick bridges have been completed, and ten are in progress; two screw-pile bridges are completed and two are nearly finished.

Sylhet and Cachar Trunk Road.

Various improvements have been carried out at several places on what is called the Assam Trunk Road; on the roads in the Khasi and Jynteah Hills, and on those in the Garo Hills.

Assam roads.

In addition to the provincial works noticed above, the following have been carried out by funds supplied from what is called the Provincial

PROVINCIAL RESERVE FUND.

Reserve Fund, *i.e.* the balances and receipts from Provincial as distinguished from Imperial sources :—

Improvement and maintenance of the Calcutta and eastern canals; works on the Nuddea rivers; maintenance of the Strand Road and bank, Calcutta; expenditure on tolls, ferries, and staging bungalows. The total amount expended on these works was Rs. 4,27,726.

On the Calcutta and eastern canals, the new cut at Jattrapore has been completed; it is 1,660 feet in length, and shortens the passage by $5\frac{1}{2}$ miles. The deepening of the Julokatty and Bhangore khalls to 4 feet below low water has been very nearly completed.

Canals.

The outlay on canal works during the year has been Rs. 2,08,283, and the income Rs. 3,81,453.

The keeping of the Bhagiruttee River open for native boats during 1872-73 was not as successful as the previous year. Owing to a change in the bed of the Ganges, the Bhagiruttee was lengthened 12 miles, and on the outside of the new entrance there was shoal water for $2\frac{1}{2}$ miles.

Nuddea Rivers.

The supply of water from the entrance being much less than that of previous years, an increase in the number of shoals naturally resulted. These were this season $6\frac{1}{2}$ times as numerous, and 13 times as long, as those of the preceding year. The keeping open of a navigable channel was a work of great difficulty, and could only be carried out at an unusual cost. The result has been that the least depth maintained this season was 2 feet instead of 3 feet, as usual, and consequently a great diminution in the traffic has occurred.

The toll collections during the past year fell to Rs. 2,19,376, being Rs. 38,381 less than last year. The available net revenue of the Nuddea rivers for the past year amounted in round numbers to nearly one and a half lakhs of rupees.

The works in connection with the maintenance of the Strand Road and Bank in Calcutta, and with the tolls, ferries, and staging bungalows, were of an unimportant character, and do not call for special notice.

A proposal was made during the year to open out a canal from Terriaghat, at the foot of the Jynteah Hills below Cherapoonjee, to Companygunge, on the Soorna river, and an Assistant Engineer was sent to report upon the project. The report submitted did not, however, give sufficient detail to enable a definite opinion of the scheme to be formed, and the Chief Engineer thought that a better line might be obtained by starting at some point further down the river than Companygunge. A full investigation of the locality will be made during the cold season.

The works of the new floating bridge across the river Hooghly in Calcutta were commenced during the year, arrangements for the principal portions of the bridge, comprising the contracts for pontoons, girders, &c., having been put in hand in England by the Right Hon'ble the Secretary of State for India. A considerable amount of work has been done by the contractors, and a portion of the iron-work has arrived, and is being put together; but the progress in England has not been what was expected, and work in this country has been delayed in consequence. Mr. Leslie, the Engineer of the bridge, proceeded to England in April last, but is expected to return in the cold season.

The expenditure by District Road Committees has amounted to Rs. 9,92,006. Payment for Public Works establishment employed on district works has not been enforced for the year under review, those establishments being supplied at the provincial charge.

The following table shows the total expenditure by these Committees in each district, exclusive of the cost of the Public Works establishment:—

BENGAL.						
WESTERN DISTRICTS.						
Burdwan ... ..	...	...	39,131	Beerbhoom ... ..	...	18,825
Bancoorah ... ..	...	...	4,357	Midnapore ... ..	...	22,804
Hooghly with Howrah			...	Rs. 31,433		
CENTRAL DISTRICTS.						
24-Pergunnahs ... ..	...	...	82,725	Rajshahye ... ..	...	20,039
Nuddea ... ..	...	...	60,537	Rungpore ... ..	...	12,303
Jessore ... ..	...	...	13,770	Bograh ... ..	...	973
Moorshedabad ... ..	...	...	36,209	Pubna ... ..	...	4,157
Dinagapore ... ..	...	...	13,740	Darjeeling ... ..	...	27,107
Maldah ... ..	...	...	8,398	Julpigoree ... ..	...	18,290
EASTERN DISTRICTS.						
Dacca ... ..	...	...	54,939	Cachar ... ..	...	34,001
Furreedpore ... ..	...	...	18,377	Chittagong ... ..	...	15,659
Backergunge ... ..	...	...	12,129	Noakhally ... ..	...	9,242
Mymensingh ... ..	...	...	11,113	Tipperah ... ..	...	17,441
Sylhet ... ..	...	...	4,321	Hill Tracts of Chittagong	...	11,392
BEHAR.						
Patna ... ..	...	...	22,621	Chumparun ... ..	...	13,231
Gya or Behar ... ..	...	...	15,205	Monghyr ... ..	...	28,404
Shahabad ... ..	...	...	27,974	Bhaugulpore ... ..	...	19,476
Tirhoot ... ..	...	...	57,223	Purneah ... ..	...	15,329
Sarun ... ..	...	...	22,862	Sonthal Pergunnahs	...	9,738

ORISSA.

Cuttack	...	...	...	16,770	|	Pooree	...	...	...	...	4,356
			Balasore	...			...	Rs. 10,644			

CHOTA NAGPORE.

SOUTH-WEST FRONTIER AGENCY.

Hazareebaugh	...	...	...	9,419	|	Singbhoom	...	...	...	9,428
Lohardugga	...	...	...	18,177	|	Maunbhoom	...	...	...	16,858

ASSAM AND ADJACENT HILLS.

Gowalparah	...	...	...	7,614	|	Lukhimpore	...	...	...	13,252
Kamroop	...	...	...	1,7443	|	Naga Hills	...	...	...	1,208
Durrung	...	...	...	10,595	|	Khasi and Jynteah Hills	...	...	...	10,217
Nowgong	...	...	...	10,932	|					
Sebsaugor	...	...	...	14,467	|	Garohills	...	...	...	2,972

The Accountant-General's figures show a larger expenditure by District Committees than the above. It appears that some expenditure at the end of the year had not been brought on the books of the Public Works Department.

The outlay under this head is in connection with the improvement and proper maintenance of the embankments of rivers; the sums expended are recovered from the various zemindars whose estates are benefited by the work done. The major portion of the outlay has been incurred by the Irrigation Branch.

The statements in the Appendix IIIB, 1 and 2, show the expenditure on capital and maintenance establishment of the various great works and classes of works, and the financial results of the works classed as reproductive. A full explanation of the financial arrangements for carrying on public works in 1873-74, with lists of provincial roads and notices of the most important buildings, &c, will be found in the Chapter on Provincial and Local Finance.

CHAPTER XVIII.

IRRIGATION WORKS.

THE irrigation works in progress were briefly described in the report of the past year. A drainage scheme in the Hooghly district has since been added.

The works in progress during the year belonging to the Orissa scheme comprise—

THE ORISSA SCHEME.

Portions in progress.

The Kendrapara Canal; the Pattamoondi Branch; the Taldunda and Machgong Canals, and the High Level Canal.

Kendrapara Canal.

The Kendrapara Canal was opened for 40 miles of its length in 1869, and has been used for traffic since then. An extension of 15 miles to improve the communication with the harbour was sanctioned at the end of the year and commenced. During the year the distributaries, which had been constructed in a hurried manner, have been improved; they can now afford irrigation to about 85,000 acres.

The Pattamoondi Branch.

A large quantity of earth-work, and some little masonry work, was done towards the Pattamoondi branch of the canal.

Taldunda and Machgong Canals.

The Taldunda and Machgong Canals are in use for about one-third of their length, of 52 miles in the former and 53 in the latter. Some additions have been made to the distributaries, and these channels can now afford irrigation to about 30,000 acres.

The High Level Canal.

The High Level Canal was designed to form a navigable communication between Cuttack, Balasore, Midnapore, and Calcutta, as well as to irrigate a large tract of country in its course. The first portion, 32 miles in length, from Cuttack to the river Brahminee, is open; and the greater part of the distributaries are completed for an area of 80,000 acres. From the Brahminee to the Byturnee, and Salundi near Bhuddruck, 30 miles in length, the canal has been vigorously pushed on. The principal masonry works are about half finished, as well as the earthwork; and if progress is made at the same rate in future, this portion will probably be ready for use in 1875-76. Surveys are in progress for the continuation of this canal up to Balasore; but no work

has been commenced as yet, nor has it been decided whether these works will be prosecuted. Colonel Haig before his departure made a very careful estimate of the cost of the works under execution and in contemplation by the light of the large practical experience which we have now gained.

The estimated cost of the works of the Orissa scheme under construction, according to Colonel Haig's note, inclusive of interest, &c., is Rs. 2,59,82,000, of which Rs. 1,38,95,000 have been spent up to the end of the year. The portions of the Orissa scheme not yet undertaken are those for the irrigation and protection of the Pooree district, estimated to cost Rs. 1,32,24,000. The continuation of the High Level Canal for navigation and irrigation from Bhuddruck to Balasore, distance 47 miles, was estimated to cost Rs. 48,82,000. The last range of this canal from Balasore to Midnapore, 70 miles in length, has only been roughly estimated to cost for the main canal works about Rs. 60,000 per mile, with distributaries, establishment, &c. This would probably come to Rs. 1,00,000; the whole cost of the Orissa scheme would be rather more than Rs. 5,00,00,000. The maintenance of the works completed cost Rs. 24,000 in the last year, and repairs to the embankments for the protection of the country from flood Rs. 83,000.

A most disastrous flood occurred in the Mahanuddi in the rains of 1872. It lasted from 28th June to the 7th July, damaged the Naraje and Mahanuddi weirs, and poured an accumulation of water over the Pooree district never previously experienced. The damage done made necessary repairs and additions to the works estimated to cost Rs. 4,73,000.

Damage by flood.

The Midnapore Canal is now practically complete in regard to its main channels, and connects the town of Midnapore with tide water in the Hooghly at Ooloobaria, 16 miles below Calcutta. The whole navigable length is 53 miles; but to make the navigation safe at all times of the tide, it will be necessary to construct two additional locks between the Roopnarain and Damooda. The distributaries and drainage channels are still incomplete. Four locks and the embankment of the right bank of the Cossye were completed during the year. The canal is now capable of affording irrigation to about 72,000 acres, or about half of what it is intended for when the distributaries are complete.

MIDNAPORE CANAL.

Progress and state of the works.

There was a heavy flood in October 1872, which caused considerable damage, washing away the head sluice at Panchkoora and inundating about 30 square miles of country. The sluice was rebuilt during the year. The cost of the damage was estimated at Rs. 52,709.

Damage by flood.

The cost of the whole scheme, including interest, is estimated by Colonel Haig at Rs. 93,13,000, of which Rs. 60,46,000 have been spent. The Midnapore Canal was originally part of the Orissa scheme. The estimated cost of that scheme, if fully carried out, may therefore be taken to be about six crores of rupees, or six millions sterling.

Cost and expenditure.

The tidal canals consists of two reaches connecting the rivers Hooghly, Huldi, and Russoolpore in the Hidgelee portion of the Midnapore district. They have been nearly completed, a small portion of one lock and the turfing of the banks only remaining to be done, and they will be available for navigation by September 1873. The works are estimated to cost Rs. 19,95,000, of which Rs. 18,42,000 have been expended.

TIDAL CANAL.

The Soane canal is designed for the irrigation of South Behar, in the districts of Shahabad, Gya, and Patna. It has also been proposed to extend it eventually to Mirzapore on one side and to Monghyr on the other. The works consist of a weir across the Soane at Dehree, $2\frac{1}{4}$ miles long and 8 feet high, with head works on each bank for the main eastern and western canals. From each of the main canals branches will be taken off. The weir has been nearly completed to height of five feet, and the head sluices are well advanced. The Eastern Main Canal is nearly completed to the size which has been sanctioned for a length of 8 miles, but it may be necessary to enlarge it hereafter. On the Patna Canal about 67 per cent. of the earth-work has been executed during the year.

SOANE CANAL.

Nature of works.

Masonry has been commenced on some of the falls and bridges, and much material has been collected. It is ultimately to be made navigable, but at present only the works required for irrigation have been sanctioned. The Western Main Canal is nearly completed to the dimensions at present sanctioned for a length of 22 miles. The bridges and syphons are in progress, and will probably be completed in the ensuing year. On the Arrah Canal, a branch, 75 per cent. of the earth-work is finished, and six locks, seven bridges, and two syphons, are in progress, and large quantities of material have been collected. It will probably be available for regular irrigation in 1874; but already, consequent on the extreme dryness of the season, a considerable amount of water has been supplied in a rough way without charge, and it is hoped this may actually save the crops of a considerable area. Another branch has been designed to connect the Soane and the Ganges near Buxar by a navigable channel 45 miles in length, affording irrigation to 190,000 acres. Some of the large distributaries, such as the Beheea and Chousa, may almost be considered as branch canals. The estimate for the scheme at present contemplated is Rs. 2,67,50,000, of which Rs. 74,54,000 have already been spent. Of this sum 28,00,000 have been expended during the current year.

Eastern Main Canal.

Patna Canal.

Western Main Canal.

Arrah Canal.

Buxar branch and large distributaries.

Cost of the scheme.

been expended during the current year.

In addition to the large canals above mentioned, some miscellaneous works have been in progress during the year in the Irrigation Department. First of these is the scheme for the drainage of the

Miscellaneous works.

Hooghly district. A very careful inquiry was conducted by the officers of the Irrigation Department into the condition of the tract of country lying between the Hooghly and Damoodah rivers with respect to drainage and water-supply. This inquiry was divided into two branches. Mr. Whitfield, who was in charge of the engineering survey, was instructed to run lines of levels east and west at intervals of one mile, from which could be ascertained the level of the country and its height above mean sea-level, to establish rain gauges at various points in the district, and to observe the quantity of water flowing off in the principal drainage outfalls. A Deputy Magistrate, working under the orders of the Collector of Hooghly, was detached to procure information on the following points:—

1. The changes, recent and traditional, which had taken place in the heads of rivers intersecting the country, and those now in progress.
2. The tracts where water lodges, so as to render them quite unculturable, and those which were more or less injured from the same cause.
3. The system of drainage and irrigation now in use, and its results.
4. Any other points calculated to show exactly the way in which the agriculture of the country was influenced by the want or otherwise of drainage.

The inquiries were conducted under very great difficulties, and at the close, out of a staff of 13 Public Works officials engaged on the survey, an Executive Engineer and his best assistant had been sent home sick, others had either left from failure of health or been dismissed for incompetency, and three only remained. The result of the inquiry

showed that the state of the country was as bad as it well could be. The river channels had silted up until the level of their beds was above that of the country, drainage in any form hardly existed, and large areas were rendered unculturable by the accumulation of water. The water-supply was derived from tanks filled from a catchment basin, defiled by the sewage of a population averaging more than 1,000 per square mile. It was ascertained to be apparently practicable to drain these swamps and to throw a fresh supply of water into the dried-up river channels. The whole results of the inquiry were embodied in a note by Colonel Haig, and the works he suggested are now under the consideration of Government. Already operations on a small scale have been commenced under the sanction of Act V (B.C.) of 1871 for the drainage of the tract lying between Serampore and Howrah, known as the Dancoonee Jullahs, and the drainage cuts were prepared to run off the water during the rainy season of 1873.

The work in progress at Dancoonee consists in draining two series of swamps, the Boidyabattee and the Bally, the former having a catchment basin of 30, and the latter of 20, square miles. The area of the land swamped by the water varies from $2\frac{1}{2}$ to 9 square miles in the cold and rainy seasons respectively, and the rise of water in the latter season is about 7 feet. Cuts have been designed to drain this down to a conve-

nient level, and two sluices, one at Boidyabattee and one at Bally, have been designed to prevent or admit the influx of the tide. The whole estimate amounts to Rs. 4,32,554, of which Rs. 64,000 have been spent during the year. The cost is to be borne by the landholders interested under the Act above-mentioned, but Government advances the funds in the first instance.

Observations have been made during the year to ascertain the rise of the tide in the Hooghly.

Tidal observations.

Four self-acting gauges and nine

ordinary ones have been set up and observed.

The workshops at Cuttack and Dehree have been in full work during the year, and at the latter place

Workshops.

a Training School for twenty-four apprentices has been established. The

Training School.

boys are taught for a part of the day in the school and employed in the shops during the remainder of the time. Some of the children of the workmen are also being instructed in the shops, and have turned out some very fair work in the moulding shop. The engines on the Soane Canal, 34 in number, have been worked throughout the year by men trained in the Dehree shops without an accident.

Outlay on Irrigation Works.

The total outlay during the year on account of the Irrigation Canals has

been as follows:—

Charged to capital	...	...	Rs. 44,79,410
„ to revenue	...	...	„ 3,34,210
Works for which no capital or revenue account is kept			„ 6,70,870

Total Rs. 54,84,490

This latter item is principally the cost of the embankments for the protection of the country from flood, but it includes small miscellaneous items, such as the tidal observations, cement experiments, &c.

The revenue-paying canals are those in Orissa and Midnapore, and

Revenue from Irrigation Canals.

the returns are derived mainly from two sources,—the rates charged for water

used in irrigation, and the tolls levied on boats navigating the canals.

In Orissa the area irrigated in 1872-73 was 4,753 acres. This

Area irrigated in Orissa.

is less by 6,900 acres than the area irrigated in the previous year; but the

rainfall was 23 inches in excess, and a large lease taken by the Rajah of Durpun for two years was not renewed. The amount of water-rate assessed for this area was Rs. 5,454. Miscellaneous revenue produced

Amount of assessment.

Rs. 1,872, making a total of Rs. 7,326.

The actual realizations of the year, including arrears of previous years, amounted to Rs. 28,678, and the

Realisations and remissions.

cost of management was Rs. 41,440, so that the actual loss was Rs. 12,762.

The balance unadjusted at the end of the year was only Rs. 3,516.

Rs. 22,371 were remitted during the year, being the irrecoverable balance of previous years.

The Commissioner states that many of the old leases were so loosely drawn up, and the actual receipt of water was so difficult to prove, that the adjustment of the accounts was tedious beyond measure; but he closely watched the whole process, and can guarantee that no portion of the large amount remitted was either legally or justly recoverable. The whole of the outstanding arrears of account have now been brought up and cleared, and the system of management and account placed on a sound and satisfactory footing. In the present year water leases to a moderate extent have been taken in a good and healthy and thoroughly voluntary manner. But there is no denying that the amount irrigated is excessively small compared to the magnitude of the work, and but a small fraction of the area originally contemplated.

In Midnapore the area irrigated was 13,406 acres, which was 7,378 acres in excess of that in the previous year. The rainfall was here 15 inches less than in 1871-72. In addition to this 724 acres of rice were irrigated in the cold season, but a water-rate was not charged, because the land had been inundated owing to the failure of the Panchkoora head sluice. The amount assessed for the above was Rs. 21,876, and the miscellaneous revenue amounted to Rs. 3,669, making a total of Rs. 25,545. The amount falling due during the year, including arrears, was Rs. 49,848, of which Rs. 25,107 were collected, Rs. 9,735 were remitted, leaving a balance at the

end of the year of Rs. 15,046, of which about half has since been collected. Of the remissions, Rs. 1,822 only were on account of the current year. The total receipts for the year were Rs. 28,263, and the expenditure in revenue establishments Rs. 8,761; shewing a gain of Rs. 19,502.

The revenue authorities agree in saying there is a general improvement due to the introduction of the new rules, and that matters are now in a much more satisfactory state than in previous years, and there is a prospect of still further improvement.

The returns from navigation have increased by Rs. 4,294 during the present year, the amount collected being Rs. 47,497, against Rs. 43,203 in the previous year. This increase was principally in Midnapore, where the returns amounted to Rs. 832 per mile of canal open, against Rs. 531-4 in the previous year. There was an increase of Rs. 9 per mile on the tidal canal, and a decrease of Rs. 39 per mile in Orissa. The falling off in the latter circle was due to the great damage done to the canals by the floods of the year, which rendered the closure of the canals necessary.

In the calculations above given only the cost of collecting has been set against Revenue Collections. Properly, however, the cost of maintenance must also be charged against revenue when there is revenue. The following figures treat the matter in this latter way.

The general results up to date on the canals returning revenue are as follows :—

	Rs.
Orissa Capital invested, exclusive of interest ...	1,22,15,773
Midnapore and tidal canal	69,58,123
Soane	69,33,821
Total capital invested ...	2,61,07,717

Deficiency on the year exclusive of interest—

	Rs.
Orissa	2,01,379
Midnapore	29,900
Total ...	2,31,279

Total deficiency up to date —

	Interest.	Current charges.	Total.
	Rs.	Rs.	Rs.
Orissa	16,78,897	4,33,531	21,12,428
Midnapore	9,30,437	77,195	10,07,632
Soane	5,20,603	.....	5,20,603
Total ...	31,29,937	5,10,726	36,40,663

The whole of the schemes commenced are estimated by Colonel Haig to cost when completed Rs. 8,93,63,000, say £8,936,300.

This account looks very unpromising; but it must be remembered that canals in these provinces labour under the disadvantage of having to protect the country to be irrigated from flood, as well as provide water for irrigation. Out of a sum of 441 lakhs, at which Colonel Haig estimates the cost of the Orissa works (exclusive of the canal from Balasore to Midnapore), nearly 79 are due to protective works, and the canal should in consequence be credited with some of the savings to Government resulting from them. These consist of remissions formerly allowed on account of destruction of crops by drought and inundation, and of constant expenditure on embankments. There can be no doubt also that even if the canals had not been made, a large expenditure must have been incurred by Government for protective works, as before the works were commenced the main stream of the Mahanuddy was rapidly making its way into the Katjooree, which passes into the Pooree district, where the channels are insufficient to carry even the ordinary supply. We may conclude then that the loss is by no means so great as the above figures would seem to indicate.

Of future prospects it is difficult to speak with any certainty.

Future prospects.

The rainfall in Orissa and Midnapore is large, the people averse to change. They also dread the addition which the landlords would assuredly make to their rent on account of the increased returns they would obtain from irrigating their crops. In part of Midnapore indeed the rent is taken in kind at the rate of half the produce; naturally then they do not care to make the change when they would have to pay all the cost and only reap a share of the benefits. Still the civil authorities and every

one connected with the works agree that there is an improvement—that the old feeling of hostility to irrigation in any shape has died out, and people are more willing to take the water. In Midnapore the

Prospects in Midnapore.

people are beginning so far to appreciate the benefits of the silt-bearing river water, as to drain the rain water out of their fields for the purpose of taking the canal water. In Orissa, too, the growth of cold weather crops by canal water is increasing, and there is room for great extension of cotton and other valuable crops, but unluckily at the season of cultivation there is little water in the river, and the canals are much choked with weeds.

Colonel Haig has pointed out in his note that if an embankment rate

Other sources of revenue.

could be levied, or an owner's rate, or both, the prospects of the canals would be much improved; but without these additions to the revenue it must be some years before the canals can meet the charges for maintenance.

On the Soane the prospects are better. The rainfall is less; the

Prospects on the Soane Canal.

people now irrigate largely by artificial means. The supply in the earlier part of the cold season is about 3,000 cubic feet per second, and some of the larger landholders are anxious for irrigation. The area of crops is nearly the same in the rains and in the cold season. The introduction of irrigation will probably cause a large increase in the cultivation of the more valuable crops, and there is reason to hope that this scheme may possibly prove remunerative.

In all our rainy season irrigation the great difficulty is the indisposition of the people to take water except in case of failure of the rains. They like to have the canal as an assurance in case of necessity, but most of them will not pay for water or engage to take it till the necessity actually arises. We have tried to check this tendency by demanding penalty rates and cash payments from, besides strictly enforcing the rules against, people who only come for water at the last moment. But the fear is that in practice this cannot be carried out when a crisis comes. Already this year, in October, there has been a great alarm of failure of the rains and a rush for water. With an imminent risk of famine staring us in the face, we have felt that we could not insist on cash from those who have no cash, or enforce strict rules regarding measurement, &c., when the delay would be ruinous, and a crowd of applicants all coming together at the same moment once in several years cannot be so served. We have felt that under such circumstances we must relax the rules. The people are ready enough to profit by such experience; they may well believe that when the worst comes to the worst we cannot and will not let them perish while we have the water; they know they will get it in extremity, and they wait. The subject is no doubt one of extreme difficulty.

Another unfortunate difficulty has occurred on the Midnapore Canal; it turns out that in a dry season the water in the river which supplies the canal fails, and we have consequently not been able to meet the whole demand to which the drought has given rise. At present it does not appear that we can effectually water much more than 30,000 acres at the season when there is the greatest need of water in a dry year.

CHAPTER XIX.

RAILWAYS.

EAST INDIAN RAILWAY.

THERE have been no additions to the length of the East Indian Railway during the year; the main line is 1,280 miles long, while the Jubbulpore extension is 223 miles, including the double line and sidings. The East Indian Railway has now a total length equal to 2,218 miles of single road, but for the purposes of all calculations the total length is reckoned at 1,503 miles, as above stated. The only unusual incident in the history of the East Indian Railway during the year was the breaching of the loop line by the Ganges near Bhaugulpore. In the year 1872 the river tore away its bank up to within a few yards of the rails; the erosion continued during the current year, and in September 1873 the line went. The place had been carefully watched, so no accident occurred; and a temporary diversion was soon laid down, on which the traffic could be carried. A permanent diversion about four miles in length has been for some time under construction at an estimated cost of £16,000.

Breach in the loop line.

The year 1872 was a year of recovery for the East Indian Railway traffic generally. Much effort has been, and is still being, made to accommodate the ways, and even the fancies, of native dealers, and of the local traffic. It is proposed to constitute at Patna and one or two other large stations *quasi* chambers of commerce, in which native dealers and others interested in the railway traffic shall discuss and advise upon the current questions and difficulties of railway traffic management. The civil officers of Government who live along the line had been expressly invited by the Railway to co-operate in this matter. The goods tariff has been much simplified, and tariff lists are published in the vernacular as widely as possible. Considerable reductions have been made in the rates at which the great staples of the country, such as food-grains, oil-seeds, salt, and coal, are carried. These reductions have had a marked effect upon the traffic upon the line. Among other increases it may be mentioned that during the year 1872-73 the East Indian Railway had nearly 20 per cent. more up traffic in salt alone than it ever had before.

Promotion of goods traffic.

The capital expenditure of the East Indian Railway stood at the end of the year 1872 thus:—

		£	Rs.
Main line	...	25,885,191	2,82,38,391
Jubbulpore line	...	3,569,440	38,93,934
Total	...	29,454,631	3,21,32,325

The figures in these statements represent the total construction expenditure as in the Directors' report. The discrepancy in the columns between pounds sterling and rupees results from the difference in the rate of Railway exchange. The Consulting Engineer reports that the schedules of outlay still to go against the capital account amount to £200,000 for the two lines.

The following figures show the financial results of the working of the two lines during the year 1872:—

		Main line.	Jubbulpore extension.
Proportion of working expenses	{ 1871 ...	41·75	72·33
to gross earnings	{ 1872 ...	41·23	45·11
Percentage of net earnings on	{ 1871 ...	4·89	1·21
guaranteed capital	{ 1872 ...	5·27	3·76
Gross earnings	{ 1871 ...	£2,303,887	£139,452
	{ 1872 ...	£2,437,013	£220,644

The working expenses of the main line thus continue to be most creditably low; much lower in proportion to gross earnings than on any other Indian, and than on most European lines. The accounts of the railway are made up and the earnings struck half-yearly. For some two or three years the East Indian main line has paid more than 5 per cent. during the first half-year, but it has never yet paid full 5 per cent. on the second half of any year. Under the terms of the railway contract, the public treasury enjoys half the surplus earnings over 5 per cent., while it has to make good the whole deficit when the net earnings are below 5 per cent.

The Kurhurbaree collieries belonging to the Railway Company are being rapidly developed, and the coal is turning out well. During 1872 these Collieries and factories. mines yielded 37,820 tons, and "the Chief Engineer is confident that the stipulated annual outturn of 112,040 tons will be reached during the year 1875, and thenceforth the Company will derive its entire supply from this and the neighbouring field." The Manowrie oil-factory near Allahabad is now in full work, and supplies about 400,000 gallons of cheap castor-oil annually for use in the railway. The locomotive workshops at Jamalpore on the loop line, and the carriage workshops at Howrah, are doing all that is required for the maintenance and replacement of the rolling stock. A large number of the Company's European employees, who used to be quartered at Raneegunge, have been removed to a healthier station at Assensole, higher up the chord line, and the buildings for their accommodation are nearly finished. In the Traffic Department several minor changes have been made, all of

which tend to promote the unrestricted booking of passengers either through or from station to station. Agencies for the receipt of goods had been established at some of the larger marts off the line, such as Hattrass City and Ghazeepore; improved through traffic arrangements have been made for the tea and other goods which comes from Darjeeling; and a project is under discussion for running a steamer from Patna Station to Revelgunge, a large mart in Behar north of the Ganges, which has a river-borne trade of over a million maunds a year with Bengal.

The traffic returns show that during the year 1872 the number of

Passenger traffic.

passengers increased $3\frac{1}{2}$ per cent., and the total earnings from passenger traffic increased 4 per cent.; the whole number of passengers who travelled were 5,812,277 against 5,626,589 in 1871. The main increase was in the 3rd and 4th class earnings; it is in these classes that the great bulk (nearly 99 per cent.) of native passengers of all ranks travel. The greatest increase of passenger receipts occurred at the Howrah terminus, and at places like Benares, Bankipore, Allahabad, and Baidyanath. There was some increase at other large stations like Patna, Mirzapore, and Cawnpore, but it was at the places where the pilgrim traffic comes that the increase was greatest. This trade ought to increase now that the Railway Company have succeeded in catching it; for 7,000 passengers at the Baidyanath station, 18,000 at the Bankipore station, 34,800 at the Benares station, and 28,000 at the Allahabad station, do not represent anything like the full number of pilgrims who come annually to the shrines at Deogurh, Gya, Benares, and Allahabad. Still it is something that at every one of these stations the number of passengers more than doubled during the year; at Baidyanath it more than quadrupled. The local suburban traffic in the Hooghly and Burdwan districts also increased largely.

The result of the goods traffic on the East Indian Railway for 1872 was an increase of about 52,000 tons, or 9 per cent. on the weight carried, but of only Rs. 10,000 in the goods earnings. The smallness of the increased earnings was owing to the very large reductions made by the Company in the freight charged for carrying staples, such as rice, grain, salt, hides, seeds, cotton, and saltpetre. The only staples in which the East Indian Railway traffic at all fell off during the year

Goods traffic.

were cotton, seeds, sugar, piece-goods, and rice. The cotton crop was poor, and prices were low; so very little came down to Calcutta, and the earnings of the railway for carrying cotton were £90,000 less than in 1871. Efforts are being made by the introduction of gratuitous half-pressing at some of the railway stations in the North-Western Provinces to secure the carriage of the cotton for country consumption, and some success has attended these efforts. The seed crop was very short indeed in the North-Western Provinces, and so the railway trade therein fell off, though the decrease was not nearly so large in proportion as the decrease in the export of seeds from Calcutta. The railway traffic in salt, pulses, hides, saltpetre, grain, indigo, lime, and coal, increased largely. The East Indian Railway already carries considerably more than half the salt which goes from

Calcutta to the Patna and Bhaugulpore markets. It is clear that in several items the increase is due to the railway having fairly beaten the Ganges boat trade. The Ganges traffic returns, noticed in another part of this report, show that though the railway may have secured most of the trade with Patna and Bhaugulpore, yet the downward trade in seeds from Tirhoot, Sarun, and Ghazepore, and the upward trade in rice from the eastern districts to Behar and the North-Western Provinces, is still mainly carried by Ganges boats. The Railway Company have thus still an enormous trade to attract to their line if they can. The detailed notices in the auditor's report of the trade at the different stations furnish some interesting facts as to the movement of commodities. Thus the chief marts for sugar export are Zumaneah and Buxar, whence go westwards to the Nerbudda Valley and Bombay, southwards to Bhaugulpore, and northwards to Cawnpore, large consignments of sugar. Burhea, on the Monghyr and Patna border, and Pakour in the Sonthal Pergunnahs, send away nearly half as much pulse as all the rest of the stations on the East Indian Railway put together. The principal rice consignments go sometimes upwards, sometimes downwards, from Bhulpore and other stations in Beerbhoom and the Sonthal Pergunnahs. Hides come by rail mainly from Sahebgunge, Patna, Dinapore, Cawnpore, and Delhi. These five stations send away three-quarters of all the hides that go to Calcutta by railway. Saltpetre now comes mainly from Cawnpore and places in the North-Western Provinces. Bchar sends barely one-third of the saltpetre exports by railway; its saltpetre comes mainly by boat from Revelgunge and Roshrah. Tobacco, probably grown in Tirhoot under the hills, is now sent westwards to Khandesh and Bombay from the stations in the Patna district. Turmeric in 1872, contrary to the usual direction of the traffic, came from Bombay into the North-Western Provinces and Behar. On the whole the reduction of the rates of freight on the East India Railway has been a success, seeing that it has attracted an addition of 9 per cent. to the traffic, notwithstanding the shortness of the seeds crop and the slackness of the demand for up-country cotton.

On the two lines there were during the year 89 persons killed and 85 injured, making a total of 174 persons, as against totals of 182 and 205 in the two preceding years. The accidents to trains during the last two years have been:—

Accidents.

	1871.	1872.
Collisions	13	31
Leaving the line	10	30
Fire	5	14
Running over cattle	117	114
Other causes	6	73
Total	151	262

This large increase in the number of accidents to trains is apparent rather than real, and is due to the inclusion in the reports of 1872 of trivial accidents in shunting and the like, which were not reported in

previous years. Trespass and suicide (or murder intended to pass as such) constitute the greater number of the items shown under the head of "other cases." Much increased attention has been paid during the year by railway servants, Magistrates, and by the police, to inquire into railway accidents and their causes.

EASTERN BENGAL RAILWAY.

There were no extensions to the Eastern Bengal Railway during the year 1872, and the length of single

Floods of 1871, and their results.

line open from terminus to terminus is 156 miles exclusive of sidings. But in August 1873 an extension from the Sealdah terminus down to Chitpore was opened, thus connecting the Eastern Bengal Railway with the Hooghly river and its shipping. When the Port Commissioners' jetty arrangements are complete, and the Chitpore station is in full working order, this extension ought materially to increase the through traffic. The chief work of the year 1872 consisted in repairing the damage done by the floods of 1871, in giving additional waterway to carry off the floods of future years, and in the throwing out a spur into the Ganges to protect the terminus at Goalundo. Altogether since the floods of 1871 nearly £200,000 have been spent on these works of reconstruction, which have been carried through with remarkable promptitude and energy. As much as 1,456 feet of additional waterway have been given to that part of the line where the floods were worst. That some of these works were very considerable, may be judged from the fact that during the inundations of 1871 a stream nearly half a mile broad, and in places eighty feet deep, was running across the line at a point where there had formerly been a high bank with a few inconsiderable openings.

The Goalundo spur was carried away in the rainy season of 1872, but was reconstructed, and has now stood throughout the rains of 1873.

Goalundo spur.

It protects the whole ground on which the Goalundo terminus stands from erosion, which had very rapidly taken place in 1871. The importance of this spur arises from the fact that Goalundo is almost the only eligible site for the terminus; it is just opposite the meeting of the Ganges and Berhampooter rivers, and is the natural point of debarkation for all the river-borne trade of Eastern Bengal, Assam, and Cachar. If the terminus were to be carried away, it would be very difficult indeed to find another suitable site for a terminus in the country between the Gorai and the Ganges rivers. The spur is thrown out about half a mile above the meeting of the two rivers, and had to encounter the whole force of the Ganges stream. It was built up at a cost of nearly £10,000 in all, with huge blocks of stone brought down the Berhampooter and Ganges in boats, and with heaps of artificial stone weighing two tons a-piece. Its extreme length from the bank was about 500 feet. For two or three days in August 1873 there was much risk that the spur would be carried away; indeed the river had topped the landward end of the spur. But very great exertions were made; train-load after train-load of material was thrown into the breach; the floods happily subsided somewhat, and part of the spur is still standing. The Government of

India has now appointed a committee of Engineers to consider the important question whether the Goalundo terminus can be protected at any reasonable outlay; and if so, what is the best way of effecting this object. The committee are deliberating as this report passes through the press.

The capital expenditure of the Eastern Bengal Railway at the end of 1872 stood at £2,810,948; or Rs. 30,66,189; it has not yet been finally settled what proportion of the reconstruction above noticed is to be charged to capital. This is the total construction expenditure as per books, &c., as in the case of the East Indian Railway. The following figures show the financial result of the working of the Eastern Bengal Railway during the year 1872 :—

	1871.	1872.
Proportion of working expenses to gross earnings ...	60·64	69·12
Percentage of net earnings on guaranteed capital ...	3·21	3·21
	£	£
Gross earnings ...	225,940	295,932

The working expenses bear a much higher ratio on this than on the East Indian Railway, partly in consequence of the reconstruction charges, and partly because of the higher price the Eastern Bengal Railway has to pay for its coal. As the line is so much shorter, the general charges for supervision, home expenses, &c., come heavier than on a large concern like the East Indian Railway.

In connection with the Eastern Bengal Railway there run steamers to Dacca, to Cachar, and to the jute mart of Serajunge on the Berhampooter. These steamer services are worked under special arrangements, but their profit or loss falls more or less directly on the Eastern Bengal Railway. During the year 1872 these services have on the whole earned more than in any future year, thus :—

	1871.	1872.
	£	£
Steam-boat earnings ...	24,000	38,000
„ „ expenditure ...	24,000	33,000

The large expenditure was partly due to the cost of the Cachar service for 22 months (£11,700 in all) falling into the accounts of the year under review. The steamers are of course credited with only their share of the receipts on account of the jute, seeds, rice, and passengers they book through to Calcutta.

The total increase in the passenger traffic receipts was 14 per cent. during the year 1872, while the increase in the goods receipts was 32 per cent. on the total goods earnings of the previous year. The year 1871, however, was a year of flood and disaster to the Eastern Bengal Railway; and during the year 1870 the line had not been open beyond Kooshtea, so the results of the year 1872 necessarily compare very favorably with either of those years. During the first half of 1871 there were no floods, and the whole line was open, so that the increase

Traffic statistics.

of 7½ per cent. on the total earnings of that half-year is evidence of steady growth in the traffic. There has been an extraordinary cessation in the seeds trade, due in part to a failure of the crop, and in part to the seeds of Eastern Bengal falling into disrepute in the home markets. The decrease of 25,000 tons in that traffic has, however, been more than covered by an increase of 36,000 tons in the jute trade. The steam flotilla has for the first time more than paid its way, and has helped to swell the net earnings of the Company. The working expenses, owing to the repairs of damages done by floods, and to the large outlay on the Goalundo spur, have been very heavy. Still if the Goalundo spur stands, and if there are no more floods, the Eastern Bengal Railway ought soon to pay its full guaranteed interest. There is still an immense deal of traffic between Calcutta and Eastern Bengal which it has failed to catch. Out of about 80,000 tons of salt which annually go eastwards from Calcutta, the railway gets barely 2,000 tons. It is hoped that the Chitpore station branch may bring much of this salt traffic on to the Eastern Bengal Railway.

The number of persons killed on the Eastern Bengal Railway was 7 during the year, and 9 persons were injured. The number of accidents to trains was—

By collision	...	...	3
By leaving the line	...	...	0
By running over cattle	...	...	1
Other causes	...	...	4
Total			8

STATE RAILWAYS.

The only other railways in Bengal are the two State Railways,—one to the Mutlah, and the other from Nulhatee on the East Indian Railway to Azimgunge. The Mutlah line is managed with the strictest economy, and just pays its way, leaving a few pounds towards the interest on its capital cost of £744,000. As the line had never before since its construction paid its working expenses, its administration during 1872 was so far a success. The Nulhatee line, which is the same length as the Mutlah railway, or 28 miles, cost Government £30,000. Its whole working expenses come to barely £400 a month; it runs across a country where it gets hardly any goods traffic, yet it earns 10 per cent. per annum on the capital cost after paying all expenses. This little line has not yet been under Government management for a whole year. The whole of its goods traffic earnings for the half-year came to only £1,084, while its passenger receipts came to £2,577. The cost of working the line per train mile was only six annas as compared with ten annas on the Mutlah line, where very strict economy is practised. The Nulhatee line is managed and worked almost entirely by natives of India; the only European on its staff is a mechanical engineer in charge of the locomotive shed. The result of the half-year confirm the Lieutenant-Governor's view, as expressed in last year's report, that the Nulhatee Branch Railway is "an excellent

specimen of what a cheap branch line in India ought to be, both as to construction, stock, management, and buildings." If anything comes of the project now under discussion for laying rails on the Gya and Patna road, for the accommodation of the pilgrim traffic, the Lieutenant-Governor would hope to follow the example of the Nulhatee lines in all essentials.

Although there is no fencing in the Nulhatee line, and only incomplete fencing on the Mutlah line, the number of deaths suffered during

Accidents.

the year was—

			Persons killed.	Persons injured.
Nulhatee line	...	...	0	0
Mutlah line	...	...	2	3
and the number of accidents to trains was—				
			Nulhatee line.	Mutlah line.
Collisions	...	...	0	0
Leaving the line	...	...	0	1
Running over cattle	...	...	1	4
Other causes	...	...	1	0
Total			2	5

NORTHERN BENGAL RAILWAY.

In last year's report it was stated that the final surveys and estimates for a narrow gauge railway from the Ganges through the Patna, Rajshahye, Bograh, Dinagepore, Rungpore, and Julpigoree districts, to the foot of the Darjeeling Hills, had been laid before the Government of India in September 1872. The line as there proposed was to have been 211 miles long; it was to cost about £6,000 a mile throughout; it was to tap the principal jute, rice, and tobacco exporting districts of Northern Bengal; it was to serve the tea-growing country at the foot of the Himalayas; and it was to have been linked on to the Eastern Bengal Railway by a steam ferry across the Ganges, and a short branch line from Kooshtea westward to a point opposite Dhaparee, whence the Northern Bengal Railway was to commence on the north bank of the Ganges. The Government of India (in November 1872) accepted the Lieutenant-Governor's views that the Northern Bengal Railway ought to be undertaken, and that the line advocated by the Bengal Government and the Engineer (Major Lindsay, R.E.) was the best that could be chosen. They suggested that branches to Rungpore, Bograh, Dinagepore, and other centres of trade, both to the east and to the west of the railway, would soon be found necessary when the trunk line was formed. It was further stated that the Governor-General in Council would recommend that the sanction of the Secretary of State should be given to the work.

At the same time the Government of India, referring to the correspondence which had passed with the Home Government regarding the need of railway or other efficient communication with Assam, expressed

Extension to Assam.

the view that any proposal for railways in North-East Bengal would be incomplete that did not "calculate for all extension towards Assam, or at least to the banks of the Berhampooter." It was urged that "the present tedious communication with Assam was a great evil and a great drawback to progress there," and directions were given that "a full examination, especially of the river channels, should be made, and a section taken for a railway from some suitable point between Hillee and Tengamarree to Rungpore and across the Teesta and Dhurla rivers, on to Dhoobree and thence to Gowalparah, assuming that the minor rivers shall be bridged, but that the Berhampooter will be crossed by means of a ferry." The Government of India further ordered that "north of Julpigorce the line should be surveyed to the end of the Darjeeling cart-road, as recommended by the Lieutenant-Governor," and that "if time permitted, after this information had been collected, the line south of Hillee, and between that place and Dhaparee, should be permanently aligned, and a detailed estimate prepared."

The Lieutenant-Governor arranged with the engineers for giving effect to the wishes of the Government of India. At the same time he submitted to the Government of India his opinion:—

(1.) That it would not be worth while to make a railway over an extremely difficult country to the gates of Assam unless the Government propose to continue the line along the whole length of the valley, for the reason that there are most abundant water-ways up to Gowalparah. These water-ways are used with the utmost facility, because the south wind takes boats up and the current brings them down; whereas throughout the length of the Assam Valley the prevailing wind and the current run the same way, and there is scarcely any navigation except in steamers."

(2.) That the line from Rungpore to Dhoobree would prove expensive and difficult, and that it would be impossible to bridge the Berhampooter below Gowalparah.

(3.) That if we must have a break at the Berhampooter, "it would be far preferable to have only one break by crossing the Ganges and Berhampooter together at the junction at Goalundo, and then running up on the left side of the Jaboona or present channel of the Berhampooter. We should thus not only probably get the easiest and cheapest way to Assam, but should also serve the great, most important, and most jute-producing district of Mymensing, now almost cut off from the world, and we should give facility for reaching Sylhet and the surrounding districts, as well as Assam."

The Lieutenant-Governor therefore recommended that the route for such a railway from a point opposite Goalundo through the rich district of Mymensing, with a branch to the coal and mine country in the Soorma Valley, under the Garo Hills, and up the Agrore Valley on the left bank of the Berhampooter, might be examined.

Meanwhile the engineers went on with the work ordered by the

Trial surveys towards Gowalparah.

Government of India. By the middle of April 1873 the Engineer (Major Lindsay) was able to report that he had run trial surveys from Rungpore to Dhoobree and to a place opposite Gowalparah. Both these lines

would have to cross a very great deal of drainage, and they would cost on the metre gauge £10,000 and £12,000 a mile respectively, or nearly double the estimate for the main line of the Northern Bengal Railway. The northerly length of the line to Gowalparah direct was said to run through "very rough or wild country." Major Lindsay at the same time reported that his own observations, and also the plan and sections of the road on the bank of the Berhampooter below Gowalparah, showed that an inexpensive line could be constructed on that bank, and he advised that the possibility of reaching Assam from Goalundo by the left bank of the Berhampooter should be inquired into before any definite proposals were made with regard to Assam railways. In forwarding this report, the Lieutenant-Governor asked that a survey of the left bank route might be undertaken next cold season (1873-74) from Goalundo right up the Berhamapooter Valley. To this request the Government of India was pleased to consent. This survey will be taken in hand next year, and the only unsettled question regarding this survey is whether with the survey should not be joined a reconnoissance of the break (supposed to be about 1,200 or 1,500 feet above the sea) in the Garo Hills, and close to which large, but hitherto uninvestigated, deposits of coal are said to exist.

In March 1873 Major Lindsay was able to report that he had, by a number of petty improvements of the alignment, adopted a line which would be 204 miles long in all instead of 211; that he had surveyed and estimated for the Rungpore branch, which would cost £6,750 a mile, and for the extension across the Mahanuddee to a point in the hills below Darjeeling, which would cost £6,710 a mile; that he had reconnoitred the ground on the south of the Ganges, and had selected the line which the connecting branch from the Eastern Bengal Railway ought to take. Sites for all the termini, the stations, and the junctions, were selected in communication between the railway and the civil officers. By the end of the open season Major Lindsay and his officers had staked out the whole line, except the 22 miles which followed the present Nattore road, and the work of staking out had been done without causing the slightest inconvenience to, or difficulty with, the villagers. The whole length was 204 miles, inclusive of five miles beyond the terminus originally proposed to a place named Pauchkeela, on a low spur of the Himalayas. It was hoped that by settling the Europeans and others employed at the terminus on a hill ten minutes' walk from the line, they might be kept above the malarious influence of the lower sub-Himalayan valleys. A report of the completion of all the preliminary work was submitted to the Government of India, and it was hoped that work might begin this season (1873-74). The Northern Bengal Railway will pass through some of the richest and most populous districts in Bengal which have hitherto been cut off from the markets of the world for half the year; the whole line is to cost less than £6,000 a mile, and it probably has better prospects of paying than any line yet to be undertaken in India. Sanction was not at once accorded to the scheme, as its prospects were to be considered with that of less paying lines in other parts of India. More recently, however, in view of the very

Progress on the Northern Bengal Railway main line.

precarious prospects of the crops in those parts of Bengal through which the line will run and elsewhere, the Supreme Government, in anticipation of the approval of the Secretary of State, has been pleased to sanction the immediate commencement of work on this railway, and the works have already begun.

In connection with the Northern Bengal Railway scheme may be mentioned two extensions or branches which have been proposed. One is to connect the Cooch Behar country with the railway; it is to be 38 miles long, and must be constructed, if at all, out of the surplus of the Cooch Behar Rajah, who is at present a minor and a ward of the British Government. The suggested line passes for the whole of its length through Cooch Behar, a very rich and populous tract containing 407 people to the square mile, and exporting a vast amount of produce. The Cooch Behar estate already has a cash balance, derived during British management, of £130,000, which will pay two-thirds of the cost of the whole branch line: Some day, no doubt, this branch will be undertaken. The second suggested extension was to be in the valley of the Teesta, up which a reconnaissance was to be made with a view of ascertaining how far a line could be taken, at reasonable cost, to some point which would serve as a point of departure for the Central Asian trade.

CHAPTER XX.

POST OFFICE AND TELEGRAPH.

THE Post-Master-General of Bengal has favoured the Lieutenant-Governor with the following statement of the work done in Bengal during the past year as compared with previous years :—

POST OFFICE.
Work of the Department during the year.

		1870-71.	1871-72.	1872-73.
Paid letters	carried ...	9,748,064	10,473,639	10,686,297
Unpaid letters	„ ...	7,099,019	7,620,193	8,108,611
Service letters	„ ...	204,129	.....	.....
Registered letters	„ ...	591,709	639,901	684,129
Newspapers	„ ...	1,350,503	1,418,578	1,628,798
Parcels	„ ...	150,594	144,233	169,914
		19,144,018	20,296,544	21,277,749

Service letters in 1871-72 and 1872-73 are included in paid letters.

The increase of business over last year was thus 4·8 per cent., while that year exceeded the year previous by a proportion of 6 per cent. Newspapers have taken a marked stride, 210,220 more having been carried than in the previous year.

The mails were carried daily :—

		1870-71.	1871-72.	1872-73.
By rail	... ..	892 miles.	1,045	1,045
„ mail cart	... ..	363	291	228
„ runners, boats, &c.	... ..	8,727	9,343	9,663½

There is a tendency to diminish the mail cart lines, but otherwise the figures show in all directions a steady development.

The proportion of undelivered letters has fallen, but it is said that the figures are to be received with caution. The number of letters which were finally undelivered is shown in the postal returns to be—

In 1870-71	... ..	354,888 or 5	per cent. on the total unpaid letters.
„ 1871-72	... ..	408,383 or 5·3	ditto ditto.
„ 1872-73	... ..	318,628 or 3·9	ditto ditto.

The zemindari post has now been placed under the authorities of the departmental Post Office in all the districts of Bengal, except Bograh, Darjeeling, Julpigoree, Noacolly, Tipperah, Cachar, Gowalpara, the

The zemindari post.

districts of Chota Nagpore, excluding Lohardugga, and the districts of the Patna and Assam divisions. In the districts of Bengal Proper the change has been found to work well, and to have been an improvement on the old system. The Lieutenant-Governor cannot however but recognize that there are evils and drawbacks to the change, which indeed did not much manifest themselves during Mr. Tweedie's good and conciliatory management, but which may rapidly evince themselves if ever this Government has a Post-Master-General who may be unfamiliar with the peculiarities of Bengal administration, and may not be accommodating in his dealings with the local authorities. In the Patna division, where the zemindari dāk service is still worked under the district authorities, and the Postal Department have been trying to get the management transferred to themselves, any change is strenuously opposed by all the Magistrates. A principal object of the zemindari dāk system being the conveyance of letters between police officers and Magistrates in each district, to raise money for which purpose the zemindars are avowedly taxed, it has been objected that the Postal Department employs the zemindari dāk runners in conveying general correspondence. It is a frequent source of complaint that the rules regarding postage as affecting the zemindari post are not fair and equitable. When a letter is carried partly by zemindari post and partly by Post Office lines, and in some districts even when carried wholly by zemindari agency, the whole postage is appropriated by the Post Office. One Magistrate has justly protested against a charge of postage on Government letters, when the letters are conveyed for the greater part of the distance at the cost of the zemindari dāk. The aggregate receipt of the zemindari dāk fund under Act VII (B.C.) of 1862 in the several districts, exclusive of Assam, amounted during the year to Rs. 3,13,666-4-5, and the expenditure to Rs. 2,27,777-12-1.

It will have been observed that there has been recently no development of postage communication in Bengal by mail carts. On the contrary, instead of obtaining increased facilities, those facilities have been taken away that these provinces did enjoy.

The only considerable line of mail cart this Government has now in existence is the line between Caragola and Silligoree. This line the Lieutenant-Governor has been desirous of extending to Darjeeling. He has thought that the light Murree hill carts which are in use in the Punjab might be introduced, and that the hill cart road as far as Darjeeling might be made passable for these carriages. There have, however, been departmental difficulties in the way of this extension, and the matter is now under the consideration of the Government of India. His Honor has also tried to procure the establishment of a mail cart line between Orissa and Calcutta, extending at first only as far as Balasore, as an experiment.

No such brief outline can be furnished of the working of the Bengal Telegraphic Department as has been given of the Postal Department, as the figures have not been supplied to, and are not at the disposal of, this Government.

TELEGRAPH.

There has been some correspondence, however, during the year on the extension of the telegraphic system in Bengal. The Lieutenant-Governor has strongly recommended to the Government of India the establishment of the following telegraphic lines,—from Patna to Mozufferpore, and thence to Chumparun and Segowlee; from Burhee to Hazareebaugh and Ranchee; from Gowhatty to Debrooghur in Upper Assam; and from Cuttack to False Point. The first three of these are of great political, military, and commercial importance, and the last is of the greatest maritime and commercial importance. It was His Honor's opinion that even if the new telegraphic lines should not at once pay their expenses, especially in view of the heavy rates of communication which are at present imposed, yet that the extension of the lines from Gowhatty and from Patna would ultimately prove remunerative. With regard to the Upper Assam line it was represented that the North-Eastern Frontier was now the frontier which in all India involved the most constant and various complications, and there were over small wars or raids in hand which involved the direct supervision and prompt despatch of orders. The want of a rapid communication with Assam was a continual and daily difficulty in the administration, and would remain equally so after a Chief Commissioner was established there.

The proposed line from Cuttack to False Point presented also special claims for consideration. It was of the utmost consequence to Orissa, with its peculiar geographical situation, that its sea-borne traffic should be developed, and this could not be done without a telegraph. There was now the most embarrassing uncertainty about arrivals and departures of steamers and vessels productive of the greatest confusion, and people were sometimes kept waiting for days. The cost of constructing this short line would also be small.

The Government of India, however, while approving of the branch line to Hazareebaugh and favorably viewing the project of the Patna extension, was unable to sanction the Assam and Orissa lines at present on financial considerations.

Very recently in connection with the project of the Northern Bengal (State) Railway, and with the impending scarcity, a temporary line of telegraph has been sanctioned from a point opposite Kooshtea to Julpigoree, with a branch to Rungpore, and the immediate construction of this line has been already taken in hand.

Proposed extension of telegraphic lines in Behar, Chota Nagpore, Upper Assam, and Orissa.

Temporary line from Kooshtea to Julpigoree.

CHAPTER XXI.

IMPERIAL REVENUE AND FINANCE.

FINANCIAL.

Imperial Services.

THE receipts during the year 1872-73, as compared with those of the previous year, are shown by the Accountant-General in the following statement:—

HEADS OF REVENUE.	Actuals, 1871-72.	Actuals, 1872-73.	1872-73.	
			Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.
I. Land Revenue	3,95,47,223	3,99,80,200	4,32,986	...
III. Forest	1,44,719	1,40,852	5,133	...
IV. Excise on spirits and drugs	75,44,187	69,66,832	...	5,77,355
V. Assessed taxes	80,21,219	19,27,648	...	10,93,571
VI. Customs	1,07,38,827	1,09,05,444	1,66,617	...
VII. Salt	2,57,81,344	2,66,03,699	8,22,345	...
VIII. Opium	6,80,36,096	6,06,97,930	...	82,80,066
IX. Stamps	79,27,966	84,62,563	5,24,637	...
XIII. Law and Justice	8,45,703	9,51,297	1,05,594	...
XIV. Marine	13,82,896	12,94,824	...	88,072
XV. Interest	2,39,510	1,59,559	...	79,951
XVI. Miscellaneous	9,75,833	9,46,936	...	28,897
Total ..	16,71,36,363	16,90,36,783	20,57,332	1,01,56,912

The following explanation is given by the Accountant-General of the increase and decrease in the several items:—

Increase.

I. *Land Revenue, Rs. 4,32,986.*—Larger realizations on account of arrears giving a small increase of revenue, and partly due to resettlements.

III. *Forest, Rs. 5,133.*—Greater receipts from sale of timber and from permit fees.

VI. *Customs, Rs. 1,66,617.*—This improvement was in Chittagong, the receipts from export duty there being nearly double those of the previous year.

VII. *Salt, Rs. 8,22,345.*—There was a large increase from customs duty on imported salt, and the duty on salt manufactured in Orissa, under excise regulations, was also in excess of the previous year.

IX. *Stamps, Rs. 5,24,657.*—Receipts from all descriptions of stamps were larger in 1872-73 than in the preceding year, but the principal increase was for court fees stamps.

XIII. *Law and Justice, Rs. 1,05,594.*—Chiefly for ameens' fees and magisterial fines.

Decrease.

IV. *Excise on spirits and drugs, Rs. 5,77,355.*—The entire proceeds of excise opium were credited to that department in 1871-72, whilst in 1872-73 the cost price of the drug was credited to the Opium Department; allowing for this, the receipts of the Excise Department would be almost five lakhs better than in 1871-72.

V. *Assessed Taxes, Rs. 10,93,571.*—Exemption of incomes below Rs. 1,000 per annum.

VIII. *Opium, Rs. 82,89,066.*—A smaller number of chests sold and lower prices realized; but, on the other hand, the department received a credit of 15½ lakhs for cost price of opium sold in the Excise Department, the cost price in 1871-72 being kept under Excise.

XIV. *Marine, Rs. 88,072.*—Less work done in the Dockyard for the Port Trust Commissioners and a special receipt of Rs. 50,000 in 1871-72 from sale of two inland flats.

XV. *Interest, Rs. 79,951.*—Decrease nominal, being chiefly caused by the interest due in 1870-71 on loans of the Calcutta Port Trust having been credited in 1871-72.

XVI. *Miscellaneous, Rs. 28,897.*—A smaller transfer of unclaimed deposits and recoveries of law charges against an increase under cash recoveries of payments of previous years.

Imperial Expenditure.

The expenditure in 1872-73, as compared with the previous year, is shown below:—

HEADS OF EXPENDITURE.	1871-72.	1872-73.	1872-73.	
			Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.
Interest on Service Funds and other accounts	1,53,125	1,23,027	.....	24,498
3. Refunds and Drawbacks	13,15,586	11,23,756	.....	2,21,830
4. Land Revenue	30,23,729	34,14,828	3,91,097	.....
5. Forest	1,10,221	99,017	.....	10,804
6. Excise on spirits and drugs	3,04,698	3,05,296	598	.....
7. Assessed Taxes	1,80,078	53,485	.....	1,26,593
8. Customs	6,54,871	6,52,081	.....	2,790
9. Salt	61,839	41,305	.....	10,533
10. Opium	1,59,23,458	1,80,91,371	21,67,913	.....
11. Stamps	2,03,770	3,03,873	10,103	.....
12. Administration	16,90,769	10,38,776	.....	51,993
13. Minor departments	2,50,823	3,50,918	1,00,095	.....
14. Law and Justice	70,19,002	68,27,666	.....	1,91,336
15. Marine	16,64,985	17,50,040	85,955	.....
16. Ecclesiastical	2,32,311	2,28,018	.....	4,293
17. Medical	3,62,006	3,79,252	.....	2,754
18. Political agencies	25,277	1,05,498	80,221	.....
19. Allowances and assignments, &c.	25,19,445	23,08,647	.....	10,818
20. Superannuation, &c.	6,86,084	6,94,382	8,298	.....
21. Miscellaneous	90,236	82,971	.....	7,265
22. Allotment for provincial services	1,25,20,298	1,32,03,536	6,74,538	.....
Total	4,91,41,631	5,19,85,139	35,18,816	6,75,508

The variations under the several heads arise as follows, after correction of the figures for 1871-72, to suit the classification of 1872-73 :—

Increase.

IV. *Land Revenue, Rs. 3,91,007.*—Payment of commission in the arrear for land revenue collections and larger transfers to the fund for improvement of Government estates. Also a moiety of the pay of Moonsiffs and establishments in Non-Regulation Provinces, appointed as Extra Assistant Commissioners, transferred to this head from Law and Justice.

X. *Opium, Rs. 21,67,913.*—Larger payments for cultivation principally in the Behar Agency. A blight in 1871-72 reduced the expenditure of that year.

XI. *Stamps, Rs. 10,103.*—Increase under fees to pleaders in pauper suits and discount on sale of general stamps against decrease under discount for court fees stamps.

XVI. *Minor Departments, Rs. 1,00,093.*—Deficit balance of the Inland Labor Transport Fund written off as a Labor Transport charge; special establishment for census, and payment to Asiatic Society for hire of house accommodation.

XVIII. *Marine, Rs. 85,955.*—Chiefly due to all the Marine expenditure for the Looshai expedition in 1871-72 having been adjusted to the Military Department.

XXI. *Political Agency, Rs. 80,221.*—Charges for the cooly corps of the Garo Hills expedition, and defining boundaries between British territory and Native States.

XXV. *Allotment for Provincial Services, Rs. 6,74,538.*—Special grants in lieu of old Sudder Court given up for a military hospital. Capitalization of annual allotment for house-rent and contribution for the fever-stricken districts.

Decrease.

II. *Interest on Service Funds, &c., Rs. 24,498.*—There was a special payment in 1871-72 for interest on purchase-money of an estate on a decree of the civil courts against which there is an increase for interest on Savings Bank deposits.

III. *Refunds and Drawbacks, Rs. 2,21,830.*—Smaller refunds of the Revenue Department and for unclaimed deposits.

V. *Forest, Rs. 10,604.*—Smaller expenditure on account of conservancy and working expenses.

VII. *Assessed Taxes, Rs. 1,26,593.*—Reduction of establishments consequent on the exemption of incomes below Rs. 1,000 per annum, and the assessment of 1871-72 being generally accepted.

IX. *Salt, Rs. 20,534.*—Payment of arrear salaries in 1871-72 and transfer to Land Revenue of rent of salt lands.

XV. *Administration, Rs. 51,993.*—Decrease under Lieutenant-Governor's household and tour charges, and for salaries in the Civil Secretariat and Board of Revenue.

XVII. *Law and Justice, Rs. 1,01,336.*—Smaller expenditure under the High Court and Civil and Criminal Courts, due to absence of Puisne Judges; transfer to Land Revenue of a moiety of the charges for Moonsiffs and establishments in Non-Regulation Districts, appointed as Extra Assistant Commissioners; and to the general introduction of service stamps in lieu of a departmental adjustment for official postage. Against these decreases there was a new charge of Rs. 50,000 for salary of the Commissioner of Police, Calcutta.

XXI. *Allowances and Assignments, &c., Rs. 10,818.*—Territorial and Political pensions in 1871-72 included payments on account of previous years.

XXIV. *Miscellaneous, Rs. 7,265.*—Charges for compiling the *Bengal Gazetteer* transferred to the account of the Government of India.

The principal sources of Imperial Revenue will be separately treated below.

LAND REVENUE.

The total current demand of land revenue, including malikana and the revenue of police or thanadari lands, was Rs. 3,94,39,602, of which Rs. 21,68,735 pertained to Assam, and Rs. 17,36,845 to Orissa. The remainder, Rs. 3,55,34,022, represents the revenue of the permanently-settled provinces of Bengal Proper, Behar, and Chota Nagpore, collected from 228,735 estates, of which 25,519 are classified as being under the direct management of the officers of Government.

Out of this last mentioned current demand the sum of Rs. 3,37,58,414, or 95 per cent., were collected; and of the arrear demand, amounting to Rs. 20,67,726, Rs. 17,54,039, or 84·34 per cent., were realized. The collections therefore amounted to 94·43 per cent. on the total demand. The remissions granted amounted to Rs. 39,394; of this sum Rs. 13,542 appear to have been claimable as a matter of right, remission having been granted under existing Government orders, or under written agreements held by the parties concerned. The remaining Rs. 25,852 were remitted as an act of grace for such causes as deterioration of land, insolvency of farmers, or death or desertion of ryots.

The current demand for the year of Orissa under a 30 years' settlement, payable by 5,532 estates, was Rs. 17,36,845. The collections amounted to Rs. 6,26,558, or 36·07 per cent. The arrear demand was Rs. 22,30,039, of which Rs. 10,70,466, or 48 per cent., was collected. The total balance was Rs. 22,60,277. Of the current balance of Rs. 11,10,279, the sum of Rs. 11,09,154 was not realizable by law within the year; while of the arrear balance of Rs. 11,49,998, Rs. 11,23,304 represent demands suspended on account of the famine of 1866-67. The last orders of Government in regard to these suspended demands have ruled that before any remission is finally allowed to the zemindars, an exact settlement of the ryots' arrear accounts must be insisted on, so that the zemindars may not hereafter levy the balances on account of those remitted instalments. A limit

of six months has been fixed, within which, if any zemindar fails to make a settlement of his ryots' arrears, payment of the outstanding balance will be enforced from him. Rs. 9,583 were remitted in the Orissa division during the year. Of this amount Rs. 2,068 were remissions claimable of right, and the remainder was granted as a matter of grace, owing to death and desertion of ryots, to loss of crops, and to damage caused by inundation.

The current revenue demand of Assam, under a ryotwar settlement grouped in 905 circles and estates, was Rs. 21,68,735, of which Rs. 21,58,167, or 99·51 per cent., were collected. Of the arrear demand of Rs. 71,899, Rs. 70,757, or 98·41 per cent., were realized; Rs. 318 were remitted, the greater portion being claimable of right. The balance unrealized was Rs. 11,392.

The extreme punctuality with which the revenue has been realised in Assam under a ryotwar system is very remarkable.

The demand on account of miscellaneous land revenue in Assam was Rs. 1,67,210, which includes Rs. 35,349 for house and hoe tax in the districts of Kamroop, Nowgong, Luckimpore, and the Naga and Khasi Hills; Rs. 1,03,605 for lime quarries in the Khasi Hills, and Rs. 28,265 for other miscellaneous items. A balance of Rs. 3,263 remained for collection in the district of Luckimpore, but is in course of realization.

The main facts of demand and collection for the provinces of Bengal may be thus briefly summarised.

Summary.

Of the arrear demand of Rs. 43,69,664, Rs. 28,95,262 were collected during the year; Rs. 39,084 were remitted. Thus, of the arrears due on 1st April 1872, there remained unpaid on the same date in 1873 Rs. 14,35,318. Out of this Rs. 11,49,998, or say 11½ lakhs, are due to Orissa, being principally the famine arrears explained above. There remains to account for somewhat less than three lakhs of old arrears, of which it may be observed 2½ lakhs belong to Government estates. A sum of upwards of Rs. 60,000 is arrear due for the Kurhurbaree coal-field, and a sum of about the same amount is due in the 24-Pergunnahs for Railway C class lands. Of the whole amount about half a lakh may be set down as irrecoverable or doubtful; the rest is in course of realization. Turning to current collections, if from the current demand be deducted the amount not realizable by process of law during the year, the demand amounts to Rs. 3,74,58,158, out of which Rs. 3,65,43,139 were collected, or upwards of 97·5 per cent. Of the balance, amounting to a little over nine lakhs, a considerable portion was due on Government estates; though it cannot be said precisely how much, as the amount of the demand not realizable during the year is not shown separately for such estates. The total collections on account of land revenue were Rs. 3,98,44,166, or, according to the statement furnished by the Accountant-General, Rs. 3,99,80,209. Of this amount Rs. 3,85,09,164 were realized from regularly settled estates; Rs. 9,29,237 from Government estates which are now held in many cases under ryotwaree settlement and managed directly under village headmen and tehsildars; and Rs. 1,13,232 from the sale of Government estates, an item which

consists almost entirely of the sale of Railway B and C class lands, or lands adjoining to, and connected with the Railway, formerly taken up by Government for public purposes with other railway land, but now no longer required, and which have realised very high rates at auction. On the whole, the statistics of collection are satisfactory. The Lieutenant-Governor has inquired whether an alteration cannot be made in the system under which sums not realizable by any legal process during the year are entered in the current demand, and a nominal arrear shown which is not really an arrear.

Statements E, 5 and 6 fiscal, in the Appendix, show in a tabulated abstract form the land revenue demands, collections and net balances of Bengal for the year 1872-73.

CANAL REVENUE.

The general financial results of the Bengal irrigation works have been shown in the departmental chapter of this report on irrigation works. They are briefly shown again here to complete in one place an account of the imperial revenues in Bengal during the year.

The net earnings of the year 1872-73 were Rs. 85,541—Rs. 22,953 from Orissa, and Rs. 62,588 from Midnapore; but some of the arrears of last year were collected during the season, and the total collections of the year were Rs. 1,02,931; on the other hand, the charges for maintenance and establishment amounted to Rs. 3,34,210; so that the loss on the transactions of the year was Rs. 2,31,279.

The area irrigated during the year was 18,159 acres, of which 4,753 were in Orissa and 13,406 in Midnapore. The assessments on account of irrigation were—

	Rs.
In Orissa	5,401
In Midnapore	21,876
Total	<u>27,277</u>

But out of this amount some remissions and balances were not collected, and the net collections of the year were Rs. 18,168. No useful comparison can be made with the results of previous years, because so many remissions have had to be made on account of lands of which the irrigation could not be proved, and reliance cannot therefore be placed on past returns. Matters have now been placed on a proper footing, and there is a fair prospect of improvement in future.

The collections on account of tolls on canal traffic amounted to Rs. 45,492, of which the following is the detail:—

	Rs.
Orissa	10,044
Midnapore	35,448

This shows an increase of Rs. 3,936 on the amount collected in 1871-72. There was an increase of Rs. 8,759 in Midnapore and a decrease of Rs. 4,823 in Orissa. The falling off was due to the damages done to the canals by the severe floods that took place. On the whole the

prospects of the revenue from navigation are favorable, and there is reason to hope that when the canals are open throughout from Midnapore to Calcutta, and from Cuttack to the sea, there may be a large increase under this head.

The receipts under miscellaneous items, such as sundry sales, rent of buildings, of lands and fisheries, fines, &c., amounted to Rs. 7,508 in Orissa, and to Rs. 7,304 in Midnapore, or a total of Rs. 14,812.

The total collections of the year may be summarized as follows :—

Irrigation rates for 1872-73	..	..	18,168
Ditto „ arrears from previous years			24,459
Tolls on traffic	..	..	45,492
Miscellaneous	..	..	14,812
Total	..	..	1,02,931

The works not yet paying are the Soane and Damooda canals. The latter has been postponed indefinitely. The former will, it is hoped, be available for irrigation in 1874-75.

REVENUE PAYING CUSTOMS.

Omitting the salt duty, which appears under Salt Revenue, the customs transactions of the year 1872-73 compare with the results of previous years as follows :—

RECEIPTS FROM DUTIES ON MERCHANDISE AT			
	Calcutta.	Chittagong.	Orissa ports.
	£	£	£
1840-41	324,177	991	180
1850-51	424,433	402	81
1860-61	1,356,703	4,301	1,311
1870-71	1,113,926	15,820	1,821
1871-72	1,052,152	17,767	759
1872-73	1,051,000	34,875	977

The customs receipts of the petty port of Morellunge are included in the Calcutta receipts; and so also were the customs receipts of Port Canning, until there ceased to be any receipts at all about three years ago. It will be seen that the customs receipts of Calcutta are very nearly the same as last year, while the Chittagong customs revenue proper (consisting almost entirely of export duty on rice) was nearly double as high as it ever was before. The Calcutta customs revenue of 1872-73 was 22 per cent. less than it was in the days of high duties after the mutiny; and was 5 per cent. below what it was in the prosperous year 1870-71.

The following comparative statement shows the principal articles of import and export into and from the Bengal Presidency during 1871-72 and 1872-73 upon which the customs duty was realized, the quantities, rate of duty, and amount of duty realised, being shown.

Comparative Statement showing the principal dutiable Articles of Import and Export of the Bengal Presidency during 1871-72 and 1872-73, and the Customs duty realised upon them.

IMPORTS.

NAMES OF ARTICLES.	Quantities.		Rate of Duty.	Amount realised.		Increase.	Decrease.
	1871-72.	1872-73.		1871-72.	1872-73.		
Piece-goods Cotton, viz.—							
Grey { Yards { Pieces { Pairs	492,481,002 608 6,392,720	395,343,907 14 10,398,556	5 per cent. <i>ad valorem</i>	31,37,827 13 0	30,17,554 7 0	...	4,20,243 8 0
White { Yards { Pieces { Pairs { Dozen	87,007,615 980,537 151,513	92,196,622 173 1,123,874 223,947		7,07,250 14 0	8,14,596 9 0	1,07,345 11 0	...
Colored and Printed { Yards { Pieces { Dozen	67,702,893 341,390 1,556 182,341	74,965,903 220,713 20,153 159,582	Ditto	6,99,490 12 0	6,42,453 2 0	...	57,047 10 0
Ditto, Silk { Yards { Number { Dozen	720,251 66 891	1,036,445 137 817	Ditto	46,999 13 0	65,407 11 0	18,407 14 0	...
Ditto, Woollen { Yards { Pieces { Number { Pairs { Gross	2,209,620 676 390 21,511 466,185	4,058,517 165 168 25,755 637,155	Ditto	1,42,734 15 0	2,25,879 12 0	83,144 13 0	...
Ditto, Linen { Yards { Dozen	256,364 24	349,646 8	Ditto	5,001 15 0	7,990 0 0	2,988 1 0	...
Ditto, Mixed { Yards	93,572	136,623	Ditto	4,596 1 0	5,202 1 0	606 0 0	...

Twist and Thread ...	{ Gross	33,956	37,922	...	3,61,305	7 0	3,75,319	8 0	13,954	1 0	.....
Liquors, viz.—	{ lb.	12,106,614	12,941,521	...	...	...	...	...	...	...	...
Wines ...	...	245,770	276,839	...	Re. 1 to 1½ per gallon	...	3,61,381	11 0	36,025	11 0	.....
Spirits ...	Gallons	248,983	253,594	...	ditto	...	8,58,386	15 0	1,10,140	15 0	.....
Malt ...	"	657,056	678,691	...	Anna 1	...	45,656	11 0	1,572	11 0	.....
Metals, viz.—	...	...	...	...	...	...	...	...	...	...	...
Copper ...	Cwt.	100,546	40,982	...	7½ per cent. <i>ad valorem</i>	...	3,12,984	8 0	1,80,973	14 0	1,81,990
Lead ...	"	416,492	257,480	...	1 per cent.	...	1,00,140	14 0	1,22,515	4 0	22,365
Iron ...	"	17,234	13,371	...	7½ per cent.	...	14,184	10 0	11,181	3 0	3,003
Snellor ...	"	84,067	81,695	...	Ditto	...	74,365	14 0	70,723	15 0	358
Patent Metal ...	"	45,567	31,125	...	Ditto	...	1,21,839	12 0	86,069	5 0	35,770
Tea ...	{ lb.	525,594	662,975	...	Ditto	...	66,974	0 0	48,726	12 0	17,247
Tobacco ...	...	546,538	514,922	...	10 per cent. <i>ad valorem</i>	...	29,485	0 0	43,155	4 0	13,660
All other Articles ...	{ Number	6,909,201	4,364,993	...	7½ per cent.	...	11,11,638	0 0	12,35,902	5 1	1,24,266
Total	Total Rs.	...	...	...	...	...	82,86,143	6 0	81,05,676	5 1	5,34,835
											7,15,302

EXPORTS.

NAMES OF ARTICLES.	Quantities.		Rate of Duty.	Amount realised.		Increase.	Decrease.
	1871-72.	1872-73.		1871-72.	1872-73.		
Grain, viz.—	...	...	...	...	...	...	...
Rice ...	5,063,393	7,177,391	As. 3 per maund	13,02,333	18,13,076	4 0	5,10,742
Wheat ...	549,183	127,934	...	80,113	82,931	11 0	21,430
Other Grains ...	290,026	604,691	...	73,076	93,396	14 0	75,756
Indigo ...	69,929	85,401	Rs. 3 per maund	2,73,840	3,49,136	0 0	29,819
Lac ...	74,938	65,443	4 per cent. <i>ad valorem</i>	1,10,480	81,062	0 0	2,70,667
Oil-seeds ...	4,069,105	2,210,914	3 per cent. <i>ad valorem</i>	6,04,085	3,33,424	0 0	9,361
Spices ...	102,835	34,735	Ditto	16,953	7,592	0 0	5,148
All other Articles ...	.....	.....	Ditto	40,868	44,730	3 0	3,71,147
Total	25,20,391	27,57,363	Total Rs. ...	25,20,391	27,57,363	2 0	3,71,147

OPIUM.

The receipts, charges, and net revenue of the Opium Department, and the cost of each seer of opium to the Department during the year 1872-73, as compared with the results of previous years, are shown in the statements below :—

A.—Comparative Statement showing the Receipts, Charges, and Net Revenue of the Opium Department in the years indicated below.

ITEMS.	1856-57.	1857-58.	1866-67.	1870-71.	1871-72.	1872-73
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts.						
Proceeds of sale of opium by public auction at the Presidency	3,76,14,906	5,15,84,063	1,82,33,136	5,19,89,179	6,89,75,036	5,01,35,719
Value of opium supplied for excise and medical purposes	5,83,675	4,80,425	11,54,843	14,43,642	4,395	2868
Cost price of opium sold in the Excise Department—						
Bengal Rs. 10,70,317						
Other Governments 4,50,894						
Rs. 15,27,211						15,27,211
Fines, savings, and miscellaneous receipts... ..	35,087	35,676	61,446	9,817	7,575	13,215
Confiscations	1,242	505	745	5	20	.....
Total receipts	5,82,31,910	5,21,00,669	4,94,80,710	5,04,42,611	6,89,87,016	6,06,77,013
Charges.						
Cost and charges of Oude opium	1,32,520	51,063	.....	.....	.....	.....
Salaries and establishments	6,85,282	6,40,760	5,74,211	7,29,883	7,72,040	7,81,415
Manufacturing charges	6,42,675	7,53,010	7,73,556	14,55,249	10,48,581	10,96,367
Payments for cultivation	97,40,114	73,98,871	93,05,787	1,79,28,832	1,40,73,000	1,81,99,582
Confiscations	1,201	600	4,710	.....	.....	.....
Miscellaneous disbursement	5,408	41,393	24,395	5,426	28,037	5,920
Total charges	1,12,07,266	88,83,637	1,07,42,029	2,01,19,390	1,59,23,458	1,80,83,254
Net revenue	2,70,27,644	4,32,17,032	3,87,37,511	3,63,23,251	5,30,63,558	4,25,93,759

a.—In 1871-72 the practice of adjusting to opium the cost price at Rs. 7-4 per seer was kept in abeyance; in 1872-73 it was re-introduced. In former years the cost price of the drug supplied to the Excise Department was credited to the Opium Department, but since 1871 the value of the opium shown in the second heading of receipts only represents as much as was supplied for medical use. The cost of excise opium is separately shown for the year 1872-73.

B.—Statement showing the Receipts, Charges, and Net Revenue on account of Excise Opium in the following years.

YEAR.	Sale proceeds of opium.	Cost of opium and contingencies.	Balance.	REMARKS.
	Rs.	Rs.	Rs.	
1867 ...	27,83,478	(a) 9,00,037	18,84,541	(a) Includes office and miscellaneous contingencies of the Excise Department as it is impossible to break up the charges.
1871 ...	30,42,407	(b) 10,17,108	20,25,239	(b) Includes miscellaneous contingencies only.
1872 ...	31,00,870	(c) 0,965	31,02,911	(c) The practice of debiting to the Excise Department the cost of opium at Rs. 7-4 per seer was discontinued in 1871-72.
1873 ...	21,98,941	7,303	21,91,638	

C.—Statement showing the cost of each seer of Opium in the years mentioned below, and the price realized, gross and net.

YEAR.	Cost per seer.	PRICE REALIZED.	
		Gross.	Net profit.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
1865-66	4 2 1	12 4 3	8 4 1
1865-66	5 13 6	16 8 0	10 11 3
1870-71	5 3 2	16 7 10	11 4 6
1871-72	5 7 4	20 5 11	14 14 7
1872-73	5 10 8	20 5 5	14 10 9

The Lieutenant-Governor remarked in the Administration Report for last year, p. 149, that the average cost of a chest of provision opium might be taken at a little over Rs. 400 excluding block, or about Rs. 420 to 430, allowing for value of and interest on block. This view has been confirmed by detailed calculations recently made by the Board of Revenue, which show that, exclusive of charges in the Department of Public Works, the cost of a provision chest of Behar opium of the season 1871-72 was Rs. 416-7-7, and of Benares opium Rs. 412-9-3.

It will be seen from the subjoined statement that the number of chests of provision opium of both agencies sold during the year 1872-73 amounted to 42,675, being 7,020 chests less than the number sold in the preceding twelve months. The total receipts amounted to Rs. 6,06,77,013, and the charges to Rs. 1,80,83,254, leaving a net revenue of Rs. 4,25,93,759, being Rs. 1,04,69,799 less than that of the

preceding year, and Rs. 62,70,508 more than that during 1870-71. The average price realized per chest amounted to Rs. 1,385-11-6, against Rs. 1,387-15-5 in the previous year, showing a difference in the price per chest of Rs. 2-3-11 as compared with 1871-72. It will thus be seen that the Government average (Rs. 1,200, as estimated in the Financial budget,) was exceeded by Rs. 185-11-6 per chest. This satisfactory result is attributable to the high prices for opium which prevailed in the China market during the year under report :—

1	2	3	4	5	6	7	8	9	10
Official year.	NUMBER OF CHESTS SOLD.			AMOUNT REALIZED.		Excise and miscellaneous receipts.	Total receipts.	Total charges.	Net revenue.
	Behar.	Benares.	Total.	Behar.	Benares.				
				Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1866-67 ...	29,662	12,610	42,272	2,02,97,081	1,13,16,025	6,20,004	3,82,34,010	1,12,07,266	2,70,27,644
1867-68 ...	27,622	12,505	40,127	3,55,19,519	1,60,61,544	5,10,000	5,21,00,609	88,83,637	4,32,17,032
1868-69 ...	22,000	16,040	38,040	2,80,94,761	2,01,38,375	12,47,034	4,94,80,170	1,07,42,629	3,87,37,541
1870-71 ...	27,365	21,665	49,030	3,13,39,084	2,36,50,095	14,53,462	5,64,42,641	2,01,19,390	3,63,23,251
1871-72 ...	29,985	19,710	49,695	4,10,81,111	2,60,93,925	11,080	6,89,87,016	1,59,23,458	5,30,63,558
1872-73 ...	24,375	18,300	42,675	3,44,55,479	2,46,80,240	15,41,294	6,06,77,013	1,80,83,254	4,25,93,759

The statement given on the margin shows the quantity of land brought under cultivation during the past two years. It will be seen that in the year under report there was a decrease in both agencies, as compared with the area cultivated in the previous year, amounting in the aggregate to 15,824 beegahs.

The outturn of provision opium in the Behar Agency available for sale in 1874 is reported to be 26,770 chests, against 26,182 manufactured in 1871-72, being 588 chests more in the year under review as compared with the produce of the preceding year. The outturn in the Benares Agency is 19,000 chests, against 16,793 chests manufactured in 1871-72, or 2,207 chests more in the present year. The total quantity of opium manufactured this year was therefore 45,770 chests. Out of this 26,236 chests of Behar, and 18,740 chests of Benares, together with the reserve of 8 and 16 chests respectively of the manufacture of season 1871-72, or a total of 45,000 chests, will be brought forward for sale during 1874, leaving a balance of 794 chests, viz. 534 of Behar and 260 of Benares, in reserve to be sold during 1875. The total number of chests for the China market available for sale in 1874 will thus stand at about 45,000 chests, and it has accordingly been notified in the *Calcutta Gazette* that 45,000 chests will be offered for sale.

Outturn of the market of 1874.

Agency.	1871-72.	1872-73.	Decrease.
Behar	Bgs.	Bgs.	Bgs.
Benares	529,482	522,685	6,797
	365,469	356,412	9,027
Total	894,951	879,127	15,824

The serious opium blight of 1870-71 was noticed in the report of that year. In 1872 another blight was reported, and inquiries were made by Dr. King, the Superintendent of the Botanical Gardens. It eventually turned out that the crops of 1872 were not affected by the blight to any material extent, although the dry winds prevailing at the gathering season, and other causes, reduced the general outturn far below expectation. In face, however, of the report of the renewed blight, it was determined to thoroughly investigate the whole subject, and in the

Mr. Scott's deputation.

autumn of 1872 Mr. John Scott, of the Botanical Gardens, was deputed to the blight-stricken localities with instructions to set up and work a seed garden of his own, and watch the blight when it came through all its phases. Mr. Scott was originally engaged on this investigation for one season, but he was too late to begin seed gardens himself in 1872. Since then, however, he has established two seed gardens of his own, and besides these he has under his charge the small experimental gardens at sundry sub-agencies. The Lieutenant-Governor accordingly suggested, and the Government of India has approved the suggestion, that as Mr. Scott has been deputed to opium work, he should now stay there for two or three years at least, and extend his experimental cultivation. It is believed that by watching his seed gardens, other experimental gardens, and the best ryots' opium fields, he will be able to form an idea of the soils, culture, manure, water, and season of sowing most favorable for opium in the Behar districts, which will be of great value. The Government and the officers of the Opium Department are still much in the dark about some of the important facts of opium culture, and it was felt that in the presence of so great a stake as the opium revenue no measures should be left untried by which our knowledge might be perfected. His Honor also pointed out that if the Supreme Government would accept the suggestion of making the depôt lands of the Poosah stud into a great opium experimental farm, Mr. Scott would have the most ample scope for his exertions.

The lands of the Poosah stud farm consist of two estates lying respectively on the north and south sides of the Chota Gunduck, and measuring altogether about 4,500 acres, about 20 miles east of Mozufferpore. The depôt was closed in December 1872 by order of the Government of India, and the special Stud Commission were instructed to make over the lines and buildings to the civil authorities. The Lieutenant-Governor has strongly deprecated the proposition to sell this estate. The depôt lands are well adapted for a model farm or for a timber plantation, and it is believed that no better soil could be found for the conduct of opium experiments.

In 1871 a supply of Persian and Malwa seed was obtained for experiment, and orders were also issued to try the effect of an interchange of seeds between the sister agencies of Behar and Benares, and in the case of Behar of a further interchange between the districts lying north and south of the Ganges. Although some of the Persian seed did not arrive till late, a full and careful trial

Proposed poppy experiments on the Poosah lands.

Experiments with Persian and Turkey poppy seeds.

was given last year to the Persian and Malwa seed. The experiments were a failure, and it was made quite clear that neither seed could be advantageously distributed to opium ryots of the Gangetic plains. There is always a risk, too, in making such experiments through ryots, that bad seed may get spread about the agency. The Lieutenant-Governor desired that no more Malwa or Persian seed should be distributed to ryots of the districts already tried, but it was suggested that experiments should be continued on a small scale with both seeds, and with the acclimatized seed from last year's crop, in one or two selected gardens of each agency, and that the Malwa seed might be tried in the Chota Nagpore districts, where the country is more similar to Central India.

Their failure. The results of interchange of seed between the two agencies proved more successful. The opium ryots often interchange seed among themselves; and the peculiarity of the Benares seed, that it germinates more quickly and requires less water, points it out as particularly suitable to parts of Chota Nagpore and Shahabad. These experiments were directed to be continued.

Success of interchange of seed between the Behar and Benares agencies.

It was represented in April 1872 by the Government of the North-Western Provinces that opium cultivation in the division of Jhansie was not altogether voluntary, but had been carried on under more or less compulsion. It was said, in language with which the Lieutenant-Governor entirely concurred, that the cultivation should be purely voluntary, and that any credit opium officers may expect to get for zeal and the promotion of cultivation would be more than counterbalanced if it turned out that they have unfairly forced it. It was also stated that in the district of Jaloun two annas in the rupee were kept back from the price due for opium delivered to secure a continuance of the cultivation, that illegal fees were extorted by the subordinates of the department, and that the area was undermeasured by them. The existence of these evils was ascribed to the action taken by the district officers of Jaloun and Jhansie at the request of the Officiating Assistant Sub-Deputy Opium Agent of Jaloun, in a letter in which he stated that "he had been deputed by Government to extend the poppy cultivation in these districts." The Opium Agent at Benares instituted a very careful inquiry into these complaints, and showed that the cultivation of the poppy in Jaloun and Jhansie was purely voluntary. Under all the circumstances the Lieutenant-Governor was unable very seriously to blame the young assistant for writing the letter he did, though it was an improper letter, but directed that he should be warned for his injudicious expressions. But the circumstance illustrated the danger of the practice of allowing the Opium Agents to appoint young men without test or rule of qualification, and His Honor desired that such a thing might never on any account be again permitted. The Board of Revenue must be responsible that the most vigilant care is exercised, that the cultivation is wholly voluntary, that abuses are effectively checked, and that no balances are allowed other than are absolutely necessary. At the same time the ryots are so liable to give

Supposed pressure put upon Jhansie cultivators to make them grow opium.

opium adulterated or below the standard consistency, that though it was much to be regretted that any balance should be kept, the Lieutenant-Governor did not see his way to prohibiting the practice of keeping a small margin until the opium was tested. His Honor added that there was no doubt inconvenience in the use of a beegah different from the local beegah, but it would, he feared, much confuse the Opium Department to vary the beegah in different localities; and if the exact beegah was stated in the agreement, cultivators could hardly be misled.

Contraband opium was seized and confiscated at Umballa in the

Illicit trade in opium with the Punjab.

Punjab during the year, and the inquiries made brought to notice the existence of an extensive illicit trade of opium between Bengal and the Punjab. A careful investigation was accordingly instituted in the districts of the Patna division, and many special cases of smuggling were followed up with success. The existence of an organized trade was ascertained, carried on principally by Punjabec agents, who give advances to the cultivators and purchase opium for exportation partly to Chandernagore and partly to the Punjab. The name and residence of some of these agents were ascertained, and the fact of purchases being made extensively in the Terai was confirmed. The connection of the Punjabee troopers of successive Segowlee regiments has long been known, and it is notorious that there is plenty of money to support them and pay the fine in their cases.

By way of remedial measures, orders have been issued that Magistrates should pay on the spot up to Rs. 100 in every case in which such a reward is in their opinion called for, whatever the amount of opium seized may be. In future it will only be when under the law a higher sum than Rs. 100 has to be paid, that a certificate of the amount of opium fit for use will be necessary. The Deputy Magistrate, Moonshee Ishree Persad, was also directed to work under the Commissioner of the Patna division, upon special opium duty, in such districts as the Commissioner might indicate. At the same time the Lieutenant-Governor represented to the Government of India the insufficiency of the punishment provided by the present law for opium offences, and expressed his opinion that even in the case of a first offence rigorous imprisonment ought to be provided as an alternative punishment; and that in the case of second and later offences, it ought certainly to be substituted for the simple confinement in the civil jail, which is now the only imprisonment which can be imposed under the opium law. The Government of the North-Western Provinces was also invited to co-operate in the institution of such an inquiry as had taken place in Patna in the districts of the Ghazcepoore agency.

A practical difficulty has often been felt, and some discussion has

Necessity of procuring a good chemical officer for the post of Principal Assistant Opium Agent.

recently taken place, regarding the best way of securing fit men for the post of Principal Assistant Opium Agent.

It was strongly urged by the Board of Revenue that the Principal Assistant should always be a man of first-rate chemical knowledge. The Lieutenant-Governor was not prepared to say that a competent chemist might not be found outside the ranks of the medical profession, but he feared that for the present at any rate

we should not get sufficiently skilled chemists among our opium assistants. He recommended accordingly to the Government of India that Her Majesty's Secretary of State be moved to call on the Examiners for the Indian Medical Service to certify after each examination the names of candidates who had evinced at the examination a very special knowledge of, and aptitude for, chemistry. Only men with very special chemical acquirements and skill should be so certified. Ordinarily, we should not want more than one or two such men for the Opium Department every few years, and one or two for other special appointments. But it would always be well to have in the ranks of the Bengal Medical Service a reserve of three or four men of distinguished chemical knowledge and aptitude, who might be put into vacancies in the Opium Department and other appointments where such qualifications might be required.

The Government has had a very good set of uncovenanted men in the Opium Department. It was formerly the best thing of the kind

Scientific education of opium officers.

going, and the upper men are very good practical men, but not possessed of any scientific knowledge as a rule. The Lieutenant-Governor thinks that in these days chemistry and botany are natural and proper qualifications for the opium service; and His Honor has been apprehensive that the system under which, in the present times of competition, the sons of European officers who could not obtain admission into any of the regular services were admitted into the Opium Department without examination, and sometimes without much education, might lead to evil. A system of examination has therefore been commenced, in which candidates for admission to the department are to show a knowledge of reading and writing, and a little chemistry, botany, and mensuration; and the Lieutenant-Governor quite inclines to the opinion that the service should be eventually made a scientific service.

Since the year 1868 a system has been in force of employing temporary European Assistants at the

Addition to the strength of European Assistants.

Benares Agency during the weighing season. All the opium officers have reported themselves opposed to the idea of substituting native agency at this season. Gomastahs are, it is said, the only native officials who would be eligible for the work, and their hands are already full. The

The Lieutenant-Governor's objection to this course.

Lieutenant-Governor, however, was not prepared to accept these opinions as conclusive, and some correspondence on the subject has taken place. The Behar Agency has done without them till the present year, and it is not clear why it should need them now, or why the Benares Agency should have required them. There was nothing, in the Lieutenant-Governor's opinion, in the history of the Opium Department to give ground for increasing the European agency when in all other departments native agency was more and more used, and he has declined to allow the number of Europeans to be increased, when there is no increase in the territory occupied and the opium produced. No temporary assistants are now to be employed in Behar unless, on further report, they are shown to be necessary on very special grounds, and it has been directed that the number at

Benares is not to exceed the smallest establishment of recent years. The Member of the Board of Revenue in charge has been also desired to make a regular march through the opium country at the busy season of 1874, and inspect the gathering and weighing of some of the crop.

SALT.

The salt revenue, which fell off considerably during the year 1871-72, had recovered itself during the year under review. The figures for the last three years are :—

	Total quantity of salt paying duty during the year. Mds.	Total salt revenue, including miscellaneous receipts. Rs.
1870-71	7,987,221	3,61,44,441
1871-72	7,766,133	2,54,06,065
1872-73	7,981,286	2,61,19,503

During the past year the Lieutenant-Governor has examined the salt consumption statistics of Bengal for the last eighty years. Below are given extracts from the statement furnished by the Board, showing the quantity and classes of the salt which paid duty each year, 1790 to 1871-72. It will be seen that the quantity in some years was abnormally low. But if cycles of three years are taken, it will be apparent that the consumption of salt in Bengal increased steadily, but not very rapidly, in the first forty years of this century ; increased very largely in the next few years, when the duty was reduced to Rs. 2-8 per maund ; and has remained nearly stationary, or only very slightly increased, since the duty has been again raised to the rate of Rs. 3-4 per maund.

The people of Bengal began about the year 1863 very largely to consume Liverpool salt instead of home-made salt, and by far the greatest part of the consumption is now foreign salt.

Statement showing the Quantity of duty paid Salt, the Rates of Duty, and the Salt Revenue from 1790 to 1871-72 in Bengal.

YEAR.	Excise salt.		Government salt.		Imported salt.		Total.	Rate of duty, 100 mds.	
	Quantity.	Duty.	Quantity.	Proceeds.	Quantity.	Duty.			
									Rs.
1790	3,109,000	75,68,956	...	...	3,109,000	75,68,956	No fixed duty during these years.
1800	3,245,455	83,61,772	...	...	3,245,455	83,61,772	825
1810	4,204,381	1,33,06,087	...	...	4,204,381	1,33,06,087	825
1820	4,589,066	1,50,36,088	...	...	4,589,066	1,50,36,088	825
1830	4,574,479	1,55,23,324	...	...	4,574,479	1,55,23,324	825
1840	5,046,110	1,78,77,783	...	...	5,046,110	1,78,77,783	825
1850	4,481,217	1,74,31,0	...	...	4,481,217	1,74,31,0	825
1860	4,328,772	1,89,68,748	...	...	4,328,772	1,89,68,748	825
1870	3,014,737	1,86,36,631	...	...	3,014,737	1,86,36,631	825
1871-72	3,109,000	75,68,956	...	...	3,109,000	75,68,956	825
1800	3,245,455	83,61,772	...	...	3,245,455	83,61,772	825
1810	4,204,381	1,33,06,087	...	...	4,204,381	1,33,06,087	825
1820	4,589,066	1,50,36,088	...	...	4,589,066	1,50,36,088	825
1830	4,574,479	1,55,23,324	...	...	4,574,479	1,55,23,324	825
1840	5,046,110	1,78,77,783	...	...	5,046,110	1,78,77,783	825
1850	4,481,217	1,74,31,0	...	...	4,481,217	1,74,31,0	825
1860	4,328,772	1,89,68,748	...	...	4,328,772	1,89,68,748	825
1870	3,014,737	1,86,36,631	...	...	3,014,737	1,86,36,631	825
1871-72	3,109,000	75,68,956	...	...	3,109,000	75,68,956	825
1800	3,245,455	83,61,772	...	...	3,245,455	83,61,772	825
1810	4,204,381	1,33,06,087	...	...	4,204,381	1,33,06,087	825
1820	4,589,066	1,50,36,088	...	...	4,589,066	1,50,36,088	825
1830	4,574,479	1,55,23,324	...	...	4,574,479	1,55,23,324	825
1840	5,046,110	1,78,77,783	...	...	5,046,110	1,78,77,783	825
1850	4,481,217	1,74,31,0	...	...	4,481,217	1,74,31,0	825
1860	4,328,772	1,89,68,748	...	...	4,328,772	1,89,68,748	825
1870	3,014,737	1,86,36,631	...	...	3,014,737	1,86,36,631	825
1871-72	3,109,000	75,68,956	...	...	3,109,000	75,68,956	825

NOTE.—The "rate of duty" column is so far open to correction, that the rate of salt duty in Orissa was for many years very much less than the rate for the rest of Bengal. It is only during the last ten years that the Orissa salt duty has been brought up to the full Bengal rate.

The average annual consumption of the last three years has been 7,901,546 maunds. Seventy-nine lakhs

of maunds on a population of 66½ millions gives a consumption of 4·74 seers per head, or about 9½ lb. We know that a certain amount of Ganjam salt is consumed in the tributary estates of Orissa; that a good deal of illicit salt is consumed in Behar; that some small supply of illicit salt is made along the coast by the lower classes for their home consumption; and that a small amount of foreign salt is consumed on our northern and eastern frontier. We do not yet know with any precision how much Bengal salt finds its way up the Gogra into a corner of the North-Western Provinces, but the quantity that goes beyond the limits of these provinces by railway is very small; while Agra and Delhi salts come into parts of Palamow, and occasionally find their way by train to Patna. We may fairly reckon, then, that the average consumption of salt by the people of Bengal is not very widely different from the rate above stated, viz. 9½ lb per head.

The range of the retail price of salt in different parts of Bengal during the last thirty years appears, from such records as are available, to have been as follows:—

Price of salt.

Rate of duty per 100 maunds. Rs.				NUMBER OF SEERS OF 80 TOLAHS OF SALT SELLING RETAIL FOR ONE RUPEE DURING THE MONTH OF APRIL AT—				
				Calcutta.	Dacca.	Rangoon.	Patna.	Cuttack
1840	...	...	325	8	8½	...	...	24
1845	...	...	325	8	9½	...	8	24
1850	...	...	250	10	10	...	8	21
1854	...	...	250	9½	10½	8½	8½	19
1860	...	...	300	8½	8	6	8	16
1865	...	...	325	8½	8½	7½	6½	8½
1869	...	...	325	8½	8	6	8	8½
1870	...	...	325	9	8	6	8	9
1871	...	...	325	8½	8	7½	8	9
1872	...	...	325	8½	8½	6½	8	9
1873	...	...	325	9	9	7½	8	9

The month of April has been taken throughout as the test month. It will be seen that of late years, and in ordinary Bengal districts, the retail price of salt ranges from 7 to 9 seers of 80 tolals (or about 14 to 18 lb) per rupee. The prices quoted for the older years may not be absolutely correct, inasmuch as the Government of those days did not publish price-currents. The prices quoted for the year 1854 are from Mr. Plowden's salt report of 1856, and are probably correct.

A Bengali ryot of the present day, with a wife and three children, may consume during the year (at 4·74 seers per head) about 23½ seers of salt, on which the duty would be (at Rs. 3-4 a maund) a little under Rs. 2; so that the salt tax paid by an ordinary laboring man whose yearly earnings are perhaps Rs. 60, all told, comes to nearly 3 per cent. on his income.

The price of bonded Liverpool salt in Calcutta ranged during the year 1872-73 from Rs. 56 to 104 per hundred maunds; but these fluctuations do not seem very greatly to affect the retail price of salt in the towns and bazars of the interior.

* In Orissa the full Bengal salt duty was not levied until the year 1863; the rate was Rs. 1½ a maund up till 1859; it was raised to Rs. 1½ in 1859, and to Rs. 1½ in 1861.

Salt supplies of 1872-73.

The main salt transactions of the last three years compare as follows:—

	1870-71. Mds.	1871-72. Mds.	1872-73. Mds.
Salt imported and manufactured	7,091,545	8,014,008	7,531,304
Cleared for consumption on payment of duty	7,057,221	7,704,133	7,981,286
Balance in stock at the close of the year	2,632,738	2,841,001	2,325,766
	Rs.	Rs.	Rs.
Proceeds from sale of Government salt	1,34,067	45,853	16,285
Duty on imported salt	2,49,10,428	2,41,66,330	2,45,85,766
Duty on excised salt	8,35,800	10,44,475	13,38,301
Total duty	2,58,81,285	2,52,46,658	2,59,40,352

Thus the supply of salt was 12 per cent. less in 1872-73 than in the previous year, while the consumption was more than 3 per cent. larger. The balance of salt in stock at the end of the year was therefore very much smaller than in previous years, and was barely 3½ months' consumption. Mr. Money points out that the Bengal salt stocks might in time of difficulty be dangerously low.

The imports of Liverpool salt into Calcutta were 20 per cent. smaller than during the preceding year; but as a set-off against this decrease, the imports of salt from Bombay and Madras together nearly doubled; the imports from France and Italy were three times as large as during the previous year; and the imports of Liverpool salt to Chittagong increased 60 per cent. The imports from the Arabian and Persian Gulfs decreased by about 11 per cent. It is satisfactory that the foreign sources of salt supply for Bengal are extending and becoming more permanent.

The quantity of salt manufactured under the Excise Rules in Bengal during the last three years has been—

1870-71. Mds.	1871-72. Mds.	1872-73. Mds.
578,707	214,427	303,402

Almost the whole of this manufacture takes place in Orissa, and more than half of the whole of the excised salt is made in the Pooree district. The salt manufacture is a very important industry to the poorer classes who inhabit the shores of the Chilka Lake, and it is very greatly to be wished that the industry could become permanent, instead of fluctuating from 371,000 maunds one year to 32,000 maunds next year. The circumstances of the season have no doubt much to do with these fluctuations, and salt cannot be made cheaply or well during a rainy summer like that of 1871. Still the principal obstacle to the Pooree salt industry is the great difference between the duty paid on salt manufactured at the two ends of the Chilka Lake. As the Commissioner says, the difference in price makes Pooree people consume Ganjam salt, as they are allowed by law to buy it across the border, so long as they carry home less than five seers at a time. The Ganjam salt-producers also must command the Sumbulpore and Tributary Estates markets, so long as their duty is little more than half what the Pooree salt dealers have to pay. It will be the greatest possible boon to the people of Pooree when the Madras and Orissa rates of salt duty are equalised.

The small balance of salt in the Government warehouses at Hidgellee and Pooree do not find any sale. It is said that it would have been unfair to the local salt-makers and dealers, and would have

disarranged their trade, if the salt had been offered at a greatly reduced price. The establishment in charge of these small stocks costs money, and the stocks themselves gradually get spoilt and decreased. Much of the salt had become so deteriorated, that no one would pay the duty on it. Accordingly the Lieutenant-Governor agreed to the Board's exercising its discretion and destroying the small stocks at Pooree or elsewhere, for which no purchaser could be found. Whatever will sell will be sold for what it will fetch in excess of the duty and the account closed.

It is satisfactory that the amount of salt carried by the Eastern

Eastern Bengal Railway salt traffic.

Bengal Railway should have increased by more than two lakhs of maunds. The

Lieutenant-Governor has never fully understood why the Eastern Bengal Railway gets none of the salt traffic of eastern Bengal. Native boats that bring jute and seeds to Goalundo should certainly find it worth their while to carry back salt. Possibly, now that the Chitpore station is open by the river-side, the active and successful Agent of this Railway may succeed in attracting some of the salt traffic.

The success of the measures which have recently been taken for

Introduction of Act XXXI of 1861, the Act regulating the manufacture of saltpetre, into Behar.

checking the production of illicit salt in Behar will find a place in next year's report. Act XXXI of 1861, which relates to the manufacture of common

salt along with saltpetre, was introduced this year into that province. It has been an old complaint of the Customs authorities of the North-Western Provinces that salt educed from the saltpetre manufactories in Behar, and untaxed, displaced by its cheapness a proportionate quantity of their taxed salt, and that Government was *pro tanto* the loser. Some years ago two officers of the North-Western Provinces Customs Department, who were deputed for the inquiry, estimated that over three lakhs of maunds of this salt, untaxed and illicit, found its way into consumption. Sufficient proof of a large trade was given to justify the introduction of the Act. The Board of Revenue accordingly made arrangements, and the necessary establishments have been started at a yearly cost of Rs. 39,000.

The preventive force is working under the District and Sub-Divisional Officers. It consists, besides the regular police, of a special inspecting staff, with an excise officer at each refinery, and a darogah at each licensed salt warehouse. The Nonyahs, who prepare the crude saltpetre, have to take out a license, for which they only pay four annas. The refiners, to whom the crude saltpetre is made over for preparation, pay a fee of eight annas for each refinery, and the excise officer is appointed to see that all salt educed in the refining process is destroyed, unless the refiner also takes out a license for storing and selling the salt, for which he has to pay a fee of Rs. 2, and this salt (after payment of the regular duty of Rs. 3-4 a maund) he can place in the market and sell. The scheme is still on its trial, and it is obvious that the great difficulty is to prevent oppression and extortion. It is a question also whether the margin of profit on the saltpetre trade is not so small that it may not be able to bear the burden of licenses, &c., imposed upon it. There can be no doubt, however, that the trade was bolstered up by the sale

of the illicit salt educed in the manufacture, and it is impossible artificially to maintain it on those terms. But the Lieutenant-Governor has expressed the view that it should not be unduly weighted with the cost of restrictive measures.

EXCISE.

The total excise revenue of the year 1872-73 was larger than that of 1871-72 by Rs. 4,47,407. It exceeded the average of the five years immediately preceding by Rs. 8,51,966. Including the customs duty on imported wines and other liquor, the results of the year are as follows, compared first with those of an average of the five preceding years, and next with those of 1871-72 only :—

ARTICLES.	Average, 1867-72.	1871-72.	1872-73.
	Rs.	Rs.	Rs.
Country spirits	10,78,221	10,81,448	21,77,670
Rum	4,90,405	4,23,203	4,41,223
License duty for imported wines	64,155	70,705	89,877
Tareo or toddy	5,41,500	5,70,902	6,04,752
Puchwai or rice beer	1,31,204	1,46,717	1,51,203
Ganja or hemp drug	10,37,281	11,40,329	11,80,700
Opium	20,73,762	20,82,864	21,99,180
Churrus	4,081	3,565	3,682
Sidhihi, sabzi or blang	8,153	10,103	13,342
Majoon	2,245	2,280	2,417
Muddat	61,102	66,743	71,043
Chundoo	11,355	13,570	15,909
Spirits used in arts	1,802	1,464	1,314
Total	61,09,330	65,13,505	69,61,302
Customs duty on wines, &c.	2,87,409	2,65,550	2,92,353
Ditto on spirits	7,43,730	7,46,742	8,56,697
Ditto on beer, &c.	44,817	41,102	42,467
GRAND TOTAL	71,85,292	75,07,295	81,53,009

It is a happy result that, with diminished consumption, we have very considerably increased the revenue on the whole.

The above figures show an increase in the revenue derived from country spirits of Rs. 2,34,558 as compared with 1871-72, and of Rs. 5,81,640 as compared with the average of five years. Though the increase of

this revenue is hardly a subject for congratulation, the Lieutenant-Governor believes that consumption is really checked. The measures adopted with a view to this end are the enhancement of the rates of still-head duty, the increase by auction sale of the license fees, and, above all, the restriction of the number of shops. The introduction of the new system of licensing shops for the sale of country spirits, which will be presently alluded to, has had much effect in this direction. The total number of gallons issued from all public distilleries during the year in question was 2,673,190, or 278,092 less than in the previous year, and 640,004 less than the average of five years immediately preceding it. Of the decrease in consumption as compared with 1871-72, 276,654 gallons represent the diminution in the districts where the new system of licensing country spirit shops was introduced. The average monthly license fee exacted there per shop was a little over Rs. 8 in place of Rs. 4, which was formerly customary, the increased revenue thus obtained more than meeting the falling off in the amount of still-head duty. At the same time the number of shops was reduced by 1,536 in these districts alone. The reduction in number of native liquor shops throughout the whole of Bengal was 1,559 as compared with the previous year. A similar plan has been followed of enhancing the revenue derived from shops for the sale of fermented tarec. Though there was a slight increase in the number of these as compared with the previous year, still the total number of tarec shops was less by 217 than the average of five years. At the same time the average annual fee levied from each shop has increased from Rs. 28-15-3, the average of five years, to Rs. 32-11-2, the average of the year under review.

After all the spirit revenue of these provinces is not large in view

Consumption really small.

of the vast populations they contain.

The consumption of country spirits and rum does not average more than one-twenty-fifth of a gallon per head of the population in Bengal.

The Commissioner of Patna, in his administration report for the past year, says: "The mhowa liquor most generally sold in these districts is 75° to 90° below proof, and is probably much less intoxicating than public-house beer at home. It sells at two to three annas a quart in the shops, a price which, in comparison with the general range of prices in India, is considerably dearer than that of beer in England. In Patna the annual consumption is something over one-half a gallon per head, while in Chumparun it falls as low as one-thirty-third of a gallon per head. This of course means that the proportion of people who drink is very small, for I suppose any one who drinks at all regularly is bound to consume 50 gallons of such weak liquor in the course of a year."

The use of tarec, the juice of the date tree, is by no means so injurious as that of distilled spirits; while puchwai, the chief drink of a large section of our population, is really very small beer.

In commenting last year on the extension of the out-still system

Cautious extension of out-still system
on the frontier.

to Hazareebaugh and to the Nepal
and the North-East Frontier,

Lieutenant-Governor desired that every precaution should be taken against encouraging a taste for

distilled spirits among aboriginal tribes. The Commissioner of Patna and the Collector of Purneah now report that there is no danger of this in their districts, while the Commissioner of Chota Nagpore anticipates that with a proper superintendence there will be no cause for fearing that more liquor will be produced and consumed than was the case under the central distillery system. The Lieutenant-Governor much hopes that his instructions may be borne in mind; he observes that in Maunbhoom the number of out-stills is considered by the Board to have been "much more than were required." Indeed, in the Chota Nagpore districts generally a very large number of out-stills have been licensed—181 in Hazareebaugh, 533 in Lohardugga, and 138 in the jungly tracts of Maunbhoom. The Lieutenant-Governor considers that there could have been no actual necessity for licensing such a very large number of out-stills. He hopes that this matter will receive Colonel Dalton's best attention; that inquiry will be made how much liquor, at what price, and of what kind, this large number of out-stills turns out; and that if these new out-stills have promoted drinking and drunkenness unduly, by bringing liquor to every man's door, the number of licenses should be very considerably reduced.

There were two important experiments made in the year to effect an increase in the revenue derived from country spirits without promoting consumption, each of which has been attended with some measure of success. Under the central distillery system the practice had been to charge a fixed monthly license fee, generally Rs. 4, on all shops in a district, irrespective of their locality. The tendency thus was to increase the revenue by increasing the number of shops. While some dealers, whose shops were well situated, got quick returns on their capital, others, less favorably situated, made very small profits, and some could barely contrive to continue their trade all the year round. It was thought that Government might well claim to share in the extra profits of the former class arising from local advantages, and that the shops of many of the latter might with advantage be closed. It was therefore determined to make the license fees charged for any shop correspond in some measure with the local advantages which the holder might be expected to enjoy, securing these to him at the same time by restricting the number of shops to be licensed. The amount of yearly fee for each shop can now be settled by competition at auction, subject to an upset price of Rs. 4 per mensem, or it can be determined by the Collector on a consideration of the local circumstances. Both plans have been tried in parts of the Patna, Bhaugulpore, Burdwan, and Dacca divisions.

The Lieutenant-Governor is glad to observe that the Commissioners of the various divisions take, on the whole, a favorable view of the results of the experiments which have been made. By none of them is it pronounced a failure; while the Commissioner of Dacca thinks that the trial has been very satisfactory, and that the results are the best encomium on the wisdom of the measure. Even the Commissioner of Bhaugulpore, where there were the least encouraging results, remarks that a great loss caused by the first introduction of the change was to a considerable extent recovered afterwards, and is

New excise system of selling licenses by auction, and restricting the number of shops.

sanguine that ere long the system will answer well. The Commissioner of Patna thinks there was rather too hasty a diminution in the number of shops, but is of opinion that the experiment has succeeded better than could be expected for the first year. Mr. Buckland is inclined to wait a longer trial before pronouncing the measure to be a success. It is encouraging to observe that the experiment made of taxing the materials instead of spirit in its manufactured form is also regarded as a success. Mr. Money, however, thinks that the crucial test of extending the system to distilleries in the interior yet remains to be applied. The Lieutenant-Governor will await with interest an account of the success which may attend the further experiments which are being made.

The Lieutenant-Governor cannot accept as proved Mr. Money's assertion that in most places the sudder distillery system is a total failure. The report of the Board of Revenue wholly fails to give sufficient evidence

Lieutenant-Governor's view of the sudder distillery system that it has been fairly successful.

of the smuggling, &c., said to exist. One petty fraud detected by one sub-divisional officer is all that is cited for proof. As regards thinly-peopled tracts, such as Chota Nagpore and the Nepal Frontier, Mr. Money's views have been already adopted, and a relaxation permitted in the rule requiring a fixed still-head duty to be levied on all spirits according to quality. So far as a comparison is possible between the central distillery system and the old farming (or monthly tax) system, we know that under the new system there are in some districts, and ought to be everywhere, fewer liquor shops than under the old system; we believe (but on this point we have no actual certainty) that liquor is, strength for strength, dearer than it was under the old system; we receive reports that the amount of liquor made in the central distilleries is decreasing year by year; the excise revenue on country spirits has, notwithstanding the forebodings made in the Board's special report of August 1870, and notwithstanding a largely increased import of European brandies, gradually worked up to a total considerably higher than the revenue of the year 1863-64, just before the central distillery system was introduced; and the Government is gradually reducing still further the number of liquor shops without causing any very large loss to the excise revenue. There may be corruption and peculation at outlying distilleries, but at any rate it is very difficult to believe that liquor would not be cheaper and more largely consumed under the monthly tax system, when it was the distiller's interest to produce as much as he could, and to bring cheap liquor to every man's door, than under the central distillery system, whereby a distiller must pay a still-head duty (or even under the pessimist view must pay a considerable bribe) for every gallon he distils. It certainly seems reasonable to presume that under the present system liquor must be dearer and less plentiful, and must be less forced upon the people, than under the old farming system.

The difficulty of ensuring the honest and intelligent use of the hydrometer, as well as of keeping the instruments in order, suggested the adoption, as an experiment, of the plan

Tax levied upon the materials of distillation.

of levying a tax upon the materials of distillation, instead of a duty

upon spirit according to its alcoholic strength. The head-quarters and outlying distilleries of Monghyr and the Begumpore distillery in Patna were selected for the trial. Rates were fixed after experiment calculated to be equivalent to the still-head duty previously levied. These rates in Patna were Rs. 4-8 per maund on *goor*, Rs. 3-8 per maund upon *choor*, and Rs. 3 on the other materials used in distilling spirit. The experiment appears to have broken down in Monghyr, where the system, however, is said not to have had a fair chance. In the Begumpore distillery, on the other hand, there was in the last three quarters of the year, the period during which the trial was made, an increase of 49,589 gallons of spirit passed out, and of Rs. 7,908 in the tax realized as compared with the issues and amount of duty realized during the same period of the previous year. Under the new system the produce of the tax levied on materials was equivalent to an average duty of only three annas one pie per gallon. It would therefore seem that the new system has enabled the dealers to make a large quantity of cheap weak liquor, such as the consumers demanded. If the people prefer this kind of drink to the stronger stuff turned out under the hydrometer system, it is very much better that their wishes should be met.

Although in the year under review the revenue derived from import duty on wines was somewhat larger than in the previous year, there has been a diminution both in the amount imported and in the duty paid on wines since 1868-69 and 1869-70. As compared with the former year, the difference is 54,667 gallons and Rs. 29,761, and as compared with the latter year, 52,393 gallons and Rs. 32,131. Coupled with this is an extraordinary decrease in the consumption of beer, the imports having fallen gradually from 1,022,255 in 1866-67 to 68,1963 in the past year, entailing a loss of revenue amounting to Rs. 21,434. The amount of import duty realized on beer last year was, however, less than the average of the previous five years by only Rs. 2,360. It has been ascertained that the Bombay imports of beer have also decreased of late years, though not quite in so large a proportion as the Calcutta imports;—the total Bombay beer imports of 1872-73 were 264,284 gallons, as against 356,527 gallons in the year 1866-67. It seems therefore to be clear that the imports of beer, whether on Government account or for private consumption, have considerably decreased of late years. The decrease in the Government imports may be due partly to the decrease in the number of European troops, and partly to the more frequent use of Indian hill beer for soldiers in the Punjab. The decrease in the imports of beer on private account is, the Lieutenant-Governor believes, due to a change in the habits of Anglo-Indians, who drink less beer than they used to do, substituting more generally light wine for beer as a daily drink.

The revenue derived from import duty on spirits was larger by more than one lakh of rupees than in the previous year. It is much to be regretted that there should be, as observed by the Commissioner of the Presidency division, an increase in the consumption of low class imported brandies. It may be advisable, as recommended by Mr. Money, to raise the customs duty on this class of spirit.

As compared with the previous year, there was a diminution of 220 in the number of shops licensed for the sale of ganja, and of 1,414 maunds 20 seers 10 chittacks (about 14 per cent.) in the consumption of ganja, while the revenue on the whole improved by Rs. 49,377. To have thus secured an increased revenue with a diminished consumption of this noxious drug is a very satisfactory result. It appears to be due in a great measure to the increase of the duty on flat *ganja*, which is noticed below, and also in some degree to the system adopted in the 24-Pergunnahs of putting up licenses to auction.

The Lieutenant-Governor views with regret the increase, small though it is, which is observable in the consumption of excise opium : but after all, as he has before remarked, it is only in districts with a large element of Indo-Chinese population, like Assam, Gowalpara, and Rungpore, that there is any considerable consumption. The only exception to this rule is the small district of Balasore, where consumption continues to increase, and where it has never been sufficiently accounted for. There is also consumption, but to a less extent, in the Oorya and semi-Oorya districts of Cuttack and Midnapore. It may be that the consumption is due in part to the pilgrims who pass through those districts. A moderate quantity of opium is taken in Calcutta and its suburbs, in the suburban towns of Hooghly, &c., and in Moorshedabad. In no other district does the revenue derived from it reach Rs. 80,000, except in Mymensingh, where also there is an Indo-Chinese strain in part of the population.

The Lieutenant-Governor concurs in the view that it is impossible to prevent petty illicit consumption of opium in the producing districts, notwithstanding the increased activity of the police and the large amount of Rs. 4,682 granted as rewards in the course of the year. He is, however, consoled to know that the result of inquiries has shown that opium is really not largely consumed by the people of these districts. As long as this is not the case, with the great export opium revenue derived from these districts, we can well afford to spare the petty local revenue. But the wholesale mercantile smuggling reported is very much more serious affair, and may have very serious consequences if not put down with a strong hand. The Lieutenant-Governor is strongly of opinion that in the present state of communications with free trade, and absence of custom lines, search, and restrictions, opium smuggling must be more severely punished than by fine, which can always be paid as part of the transaction, when the smugglers happen to be caught. It has been described in the last section of this chapter that there was an organized system of sending illicit opium by rail to the Punjab carried on by Punjabees settled in the producing districts, and there is, besides, as is well known, a regular flow of similarly smuggled opium to Calcutta and Chandernagore. It is hopeless to check this by the infliction of such punishment as is reported to have been awarded in one case, where an important seizure of illicit opium was made, and the smugglers got off with a fine of Rs. 250. Even putting the profit to be made as low as Rs. 5 a seer, these men would, if undetected, have cleared some Rs. 15,000 by the transaction.

Towards the close of the year the selling price of excise opium was increased by about ten per cent. in all districts except those in which opium is produced. The revenue has improved somewhat, but the late period of the year from which the change had effect renders it premature to draw any inference from this. The duty on flat ganja was also raised from Rs. 2 to 2½ per seer with effect from the 1st April 1872. The result has been a consumption diminished by 1,420 maunds, and a revenue increased by Rs. 41,828.

In accordance with the view expressed by the Lieutenant-Governor in August 1872, the supervision of the excise system has now been generally entrusted to the Sub-Divisional Officers within their respective jurisdictions. This practice had previously existed in some districts. It is now universally adopted, and there are now no special excise Deputy Collectors.

STAMPS.

Under the instructions of the Member in Charge, efforts have been made during the year 1872-73 by the various local authorities to watch the fluctuations in the stamp revenue. Though the information now given is not in all cases very valuable or complete, it is hoped that in future years considerable variations in receipts will be carefully inquired into and accounted for.

From the following figures, which give the receipts from judicial and non-judicial stamps for the last three years, it will be seen that there has been a fair increase of revenue :—

		1870-71	1871-72.	1872-73.
		Rs.	Rs.	Rs.
Judicial and court fees	... ..	48,66,168	54,03,150	58,21,690
Other stamps (exclusive of postage and telegraph labels)	... ..	25,11,116	25,15,675	26,24,427
Total		73,77,284	79,18,825	84,46,117

As in previous years, the larger proportion of the increase is due to an increased sale of judicial stamps. But it is satisfactory that the growth of the revenue from non-judicial (or general) stamps was, during the year under review, considerably greater than it had been in the proceeding year, being Rs. 1,08,752 against an increase of only Rs. 4,559 in 1871-72.

The larger sale of court fee stamps must be due to some extent to increased litigation or to the institution of suits involving large amounts, but is also largely due to the general use of court fee stamps for the payment of process fees. The eleven districts in which the increase of revenue from judicial (court fees) stamps was over 20 per cent. are situate in the Burdwan, Rajshahye, Patna, Bhaugulpore, and Assam divisions. None of these increases call for special remark.

The increased revenue from non-judicial stamps is due to larger realizations on ordinary deeds under the General Stamp Act. In six districts the increase of revenue was over 20 per cent. during the year; in four of these the increase is assignable to special and casual causes; in the fifth (Burdwan) it was due to changes of jurisdiction which enlarged the district; and in the sixth (Jessore) it is said to be due to the general increase in the number of ordinary documents executed, as attested by the Registration Department returns.

On the other hand, the receipts from the sale of bills of exchange, hundies, &c., have diminished by 8 per cent. The reason given by several officers is probably correct, viz. that currency notes are taking the place of bills of exchange; and this view is rendered more probable from the fact that the decrease in sale is chiefly in districts near and about Calcutta, where currency notes have become most popular, whilst in remoter districts and in the Behar division a normal increase still occurs.

An interesting statement was furnished by the Board of Revenue with their report showing that 30½ per cent. of the Bengal stamp revenue accrues from general stamps, while 69½ per cent. comes from judicial (court fees) stamps. There are very wide differences between the proportion borne by the two branches of the stamp revenue in different districts, thus—

In Chumparun	...	56·8 per cent.	of the gross stamp revenue
			accrued from general stamps.
In Calcutta	50·4	ditto	ditto.
In Bogra ...	47·3	ditto	ditto.
In Cachar ...	40·7	ditto	ditto.
In Luckimpore	39·2	ditto	ditto.
In Dinagapore	35·0	ditto	ditto.
In Rungpore	29·9	ditto	ditto.
In Chittagong	29·7	ditto	ditto.
In Monghyr	29·5	ditto	ditto.
In Tirhoot	29·2	ditto	ditto.
In Backergunge	27·9	ditto	ditto.
In Mymensing	27·3	ditto	ditto.
In Bhaugulpore	21·6	ditto	ditto.
In Nuddea	21·4	ditto	ditto.
In Midnapore	21·3	ditto	ditto.
In Jessore	19·4	ditto	ditto.
In Durrung	14·8	ditto	ditto.
In Nowgong	13·4	ditto	ditto.

The unusual proportion in Chumparun was due to the execution during the year of documents regarding property worth twenty lakhs of rupees; in Calcutta, where there is so much trade, general stamps might be expected to be largely used. The difference between Monghyr and Bhaugulpore is probably due to the fact that the Judge and Subordinate Judge of both districts reside at Bhaugulpore. The difference in the proportion between districts like Nuddea or Jessore, and districts like Rungpore or Dinagapore, is probably due to the fact that in the former there are many sub-divisions and moonsiffa, while in the latter there are hardly any sub-divisions and comparatively few moonsiffs' courts. It is noteworthy that in the Chittagong district, despite the

proverbial litigiousness of its population, the proportion of judicial to general stamps is hardly above the average of the whole of Bengal, including Calcutta. Possibly the requirements of the port and its trade may contribute to raise the revenue from general stamps.

Some increase is shown in the sales of postage, service, and telegraph stamps. The increase in the sale of ordinary postage stamps, barely 3 per cent., is, the Lieutenant-Governor regrets to say, very small for a country where as yet there is so very little communication by letter among its population of 67 millions. The increase in the sales of telegraph stamps (over 7 per cent.) contrasts favorably with the increase in postage stamps. The increase in the sale of service stamps is due to the orders restricting and eventually withdrawing the privilege of franking public correspondence, which has been for so many years allowed to Government servants, and of which abuse was, the Lieutenant-Governor believes, extremely rare.

The total charges of the department were Rs. 2,99,876, against Rs. 2,84,980 in the previous year; and the amount of refunds was Rs. 93,378, against Rs. 1,13,886 in the year 1871. The cost of process-serving establishments which are debitable against the judicial (court fees) stamps was Rs. 6,55,881 for the whole of Bengal.

The substitution of salaried for licensed vendors of court fee stamps has not yet been fully tried, but so far has caused much complaint. The Lieutenant-Governor has had occasion to bring specially to the notice of the Government of India the door which the use of adhesive labels, instead of the old-fashioned stamped papers, has opened to fraud and forgery; and he has had to report one very serious case of fraud connected with these labels. While these adhesive labels were introduced to save Government the cost of paper, it has been found necessary to insist on the use of a prescribed paper which is sold separately. This subject will be again taken up when the report from the Board of Revenue is received regarding this quasi-compulsory use of special paper for petitions, which is to a great degree the complement of the court fees label system.

INCOME TAX.

The income tax last year was levied under Act VIII of 1872. The changes made by that enactment in the administration of the income tax were that Rs. 1,000 instead of Rs. 750 was made the lowest taxable income; and that persons assessed under the previous

Income Tax Act on any incomes of Rs. 1,000 or upwards, except those derived from offices, public companies, or Government securities, were to be assessed at the same amount as in the previous year, unless they objected to such assessment. It appears that one-eighth of the total number of assessées paid their income tax without any fresh notices, and that only 3,514 objections were made against assessments. But it is not clear how many of these objections were against old, and how many were against new, assessments.

Results of assessment.
may be thus compared :—

The results of the assessments at two
pies per rupee for the last two years

		Number of persons assessed.		Amount of tax payable.	
		1871.	1872.	1871. Rs.	1872. Rs.
Incomes from Rs. 750 to Rs. 1,000	...	27,161	Exempt.	2,31,470	Nil.
Ditto " 1,000 to " 2,000	...	19,780	20,822	2,50,254	2,65,988
Ditto " 2,000 to " 10,000	...	11,502	11,591	4,28,772	4,27,002
Ditto " 10,000 to " 1,00,000	...	1,745	1,718	4,29,109	4,16,008
Incomes above " 1,00,000	...	110	104	4,48,270	4,06,889
Add for yield of unclassified assessments on the servants of companies	...	...	...	63,210	65,804
Total	...	60,367	34,035	18,00,021	15,81,691

The exemption of incomes between Rs. 750 and Rs. 1,000 a year has thus relieved 26,332 persons (or about 43 per cent. of the whole) from the pressure of the income tax, while it reduced the revenue by less than 15 per cent. of the demand for the year 1871-72. The administration of the Act during 1872 has also resulted in some reduction of the assessments on incomes above Rs. 10,000. The number of persons assessed on incomes ranging from Rs. 1,000 to Rs. 2,000 was considerably larger than it was in 1871-72. The explanation of this is—

- (1) That 78 more servants of companies (Part II of the Act) came into this class than in the preceding year.
- (2) That 67 persons who were assessed in the next higher class during the preceding year fell into this class.
- (3) That the report and statements for the year 1871-72 did not show 613 assessments, which were made under this class for that year after its close.
- (4) That some few (about 90) new assessments were made in this class

The income tax realized in Bengal on the salaries of Government officials was—

	Rs.
In 1871-72	1,50,754
In 1872-73	1,48,450

It would seem from these figures that the remission of income tax on official salaries ranging from Rs. 750 to Rs. 1,000 a year cost the treasury less than 2 per cent. of the income tax revenue realized from this source in 1871-72.

Proprietors of lands and houses, traders, bankers, and lawyers, contribute more largely than other classes to the income tax. Out of 104 assessments to incomes above one lakh of rupees, twenty were made on companies under Part III; of the remainder, 55 were proprietors of lands or houses. Only 21 persons engaged in trade, commerce, or banking, were assessed at Rs. 1,00,000, or upwards. Of the total number of income-tax payers—

1,558 were professional men other than Government servants;

1,768 were in service of one kind or another;

11,853 were engaged in trade;

13,649 were landholders.

The operations of the Act were carried on smoothly and without any complaint. Only three special assessors were appointed, viz. two in Calcutta and one in Dinagapore. The work was done by the Collectors, Sub-Divisional Officers, and Deputy Collectors, the percentage of charges on gross collections being only 2·5, against 7·4 per cent. in 1871-72.

The cost of administering the tax was very much less than in previous years; the amount of unrealized demand at the close of the year was comparatively small; and the only unsatisfactory feature in the administration was that at the close of the year there was still a considerable number of assessments to be made for the town of Calcutta.

MONETARY ARRANGEMENTS.

An analysis of the note circulation of Bengal shows that the value of notes paid in the treasuries was over 3 millions sterling, while the value of notes paid out of treasuries was over 2½ millions in the year. The total exceeds by about 1¼ millions sterling the corresponding total of the preceding year, and by about 3 millions the transactions of 1870-71, the year during which active efforts were first made to popularise the circulation. These totals do not include notes lying in public treasuries as part of the Government balance. During the last two years the circulation in the districts has very greatly increased; and that much of this increase is really due to an increased use of the notes by traders, bankers, travellers, and, in fact, by all classes who make large payments, or have to carry or send money about from place to place, there seems to be no doubt. The fact that small notes are in great demand in the interior, while large notes travel back to Calcutta from the districts, to some extent warrants the presumption that small notes are wanted up-country for use among the people. It may indeed be that during the last year or so, while the Indian Mints have coined comparatively little new money, the extension of the note circulation, and especially the five-rupee notes, has relieved any pressure which might have been called by the depletion (or non-repletion) of the national stock of the ordinary circulating medium.

The reports of the Collectors of Hooghly, Jessore, and Outtack, show that currency notes are largely coming into use among certain classes. It is remarkable that notes, especially small notes, which must be used by comparatively petty dealers, should pass so freely from hand to hand at rural bazars and markets in districts like Dinagapore and Purneah, which in some respects have been regarded as very backward districts. Both, however, are large rice-exporting tracts, and the demand for notes is probably due to this fact. It is matter for regret that the note circulation should be comparatively low at marts like Dacca and Patna, where there are branches of the Bank of Bengal.

The following statement shows the circulation of the last four years in Bengal :—

	1869-70.	1870-71.	1871-72.	1872-73.
RECEIPTS—				
In payment of dues ...	1,3,323,460	1,09,40,770	1,27,67,920	1,70,78,210
In exchange for silver ...	35,02,880	39,66,400	1,04,67,400	1,28,67,265
In exchange for notes ...	1,69,420	1,71,770	2,86,070	7,80,575
	1,00,95,760	1,50,79,000	2,35,11,480	3,07,21,050
ISSUES—				
In payment of demand	66,62,470	75,97,560	97,75,640	1,05,03,400
In exchange for silver	16,60,170	9,25,530	1,06,74,010	1,43,40,610
In exchange for notes	1,43,800	1,71,770	2,86,070	7,80,575
	84,71,440	86,94,860	2,07,35,720	2,56,24,645

There is a considerable increase, it will be seen, under all the heads, and it is only natural that this should be so, seeing that for two years notes have been freely cashed and freely issued at almost all the treasuries.

A proof that the notes are really passing into circulation is the fact that it is continually necessary to relieve the mofussil treasuries of high notes which have been paid into them, and to supply them with small notes for their requirements. The remittances between the Bank and the mofussil treasuries during the year were—

To Bank 99,08,055 ;
From Bank 69,36,000 ;

the former being almost all high notes, the latter almost all low ones. It is reported that the larger notes are everywhere used for remittance purposes only, and sometimes as a reserve by people who would otherwise keep coin.

The expense incurred by Government in remitting silver from one Bengal treasury to another has been—

	Rs.				
In the year 1869-70	48,777
Ditto 1870-71	37,716
Ditto 1871-72	36,981
Ditto 1872-73	31,524

These figures sufficiently show that the State is not a loser by the efforts which have been made in the last three years to popularise the Government paper currency.

The policy of cashing the notes as freely as possible at all the treasuries has in fact converted the treasuries into marts for exchange transactions. Under the old system the State had to draw away in cash its treasure from the surplus districts and pour it into deficit ones,

and of course private persons, merchants, and others had to do exactly the opposite. The cash had to find its way to the districts from which Government was always drawing it, for the simple reason that the Government could not bring it away unless it first was there to bring. And similarly with deficit districts the Government could not be always pouring money in without its overflowing. Now by the free cashing of notes at the treasuries, the two operations practically cancel each other to a considerable extent. Merchants remit by notes to the surplus districts, and draw away the cash. Government can thus send away its surplus by remitting back the notes, and matters are thus managed at considerably less cost to both parties.

The fact that 140 lakhs of notes have been taken by the public for remittances, mostly, no doubt, commercial remittances, shows the extent to which this boon is appreciated by them, and cannot fail to have its effect in the encouragement and development of trade. The manner in which these treasury exchange transactions follow the commercial seasons is worthy of note. In Backergunge there appears to be a steady drain all the year round, but the greatest demand for silver is from August till the end of the year, the season for advances. In Chittagong the demand for silver is almost entirely confined to the cold weather, November till March. In Nuddea, Hooghly, Burdwan, Beerbhoom, Dinagapore, the latter part of the cold season shows the strongest demand; it is presumably the season for export. In Purneah there is no demand for silver at all, except during the end of the cold season, and notes are in demand at other times. This is the case also with Bhaugulpore, except that the season of demand for silver is later. In Tirhoot silver is demanded largely in the first half of the official year, but part of it is again returned for notes in the last half.

The transactions of the Money Order Department for the year 1872-73 do not compare favorably with those of the preceding year. The issues and payments were as follow :—

MONEY ORDER OFFICES.

Decrease of money orders.

					Number of orders.	Amount. Rs.
Issues, 1871-72	...	...	...	...	56,315	30,35,883
" 1872-73	...	...	...	...	50,215	24,97,990
Decrease					6,100	5,37,892
Payments, 1871-72	...	...	...	...	77,811	41,19,268
" 1872-73	...	...	...	...	68,908	33,88,077
Decrease					8,903	7,31,191

This falling is attributable partly to the decrease in the number of offices, but chiefly to the greater circulation of currency notes, the exchange transactions in which at Government treasuries have increased from Rs. 2,11,31,500 in 1871-72 to Rs. 2,72,07,875 in 1872-73. It was recommended in 1872 that the separate office of agent should be abolished, and that the money order business should form a portion of the ordinary work of the treasury establishment. This proposal came into operation on the 1st February last, but it is feared that it will lead to considerable difficulties. The abolition of

agents led of necessity to the closing of all sub-divisional offices, with the exception of Barrackpore, Dum-Dum, and Serampore. The number of money order offices in the Lower Provinces of Bengal has in consequence been reduced from 99 to 58.

The first District Savings Bank in Bengal was opened at Bhaugulpore on the 11th July 1870. By the end of that year 25 banks had been established. Twenty-two additional banks were opened in 1871-72, and three more in 1872-73, raising the present number to 50. The figures from the date of establishment are—

			Deposits.	Depositors.
			Rs.	No.
1870-71	...	...	71,017	558
1871-72	...	...	2,02,512	1,311
1872-73	...	...	3,59,744	1,965

Of the 654 new accounts opened in the past year, 557 were by natives and 97 by Europeans. Of this number 52 accounts belong to local charitable and other institutions. The smallest number of withdrawals during any week of the year was in the last week of August, and the largest number of deposits was in the second week of September. The Doorga Poojah followed during the first week of October, and the largest number of withdrawals was, as might be expected, immediately preceding and following this festival. On the whole there has been progress in the district savings banks, but it is to be regretted that more persons other than the officers of the courts and Government servants, do not avail themselves of them. As it is, the use made of the Savings Banks may be said to be quite infinitesimal.

CHAPTER XXII.

PROVINCIAL AND LOCAL FINANCE.

PROVINCIAL FINANCE.

It was explained in last year's Administration Report that the management of the provincial finance in 1872 had resulted in a saving of about 14 lakhs of rupees, or £140,000. As the accounts were finally made up, the exact saving was Rs. 13,96,332.

Of this amount saved, Rs. 5,37,904 were saved in the expenditure of the Department of Public Works, and there was also a saving in pound receipts by law applicable to works of public utility and some minor items. In round numbers then of the total saving of 1871-72 about half, or 7 lakhs of rupees, may be considered as public works savings, and the other half savings in the civil departments of the administration.

It was also fully explained that the saving on provincial public works in 1871-72 was by no means owing to an income under that head in excess of the wants of the province. In fact the public works grant to Bengal had been reduced to less than half what it was a few years previously, and was extremely small for so great a province: very disproportionately so as compared to some other provinces. It was the very greatness of our necessities as compared to our means that led to extreme caution in the first instance; so that nothing but the most necessary current expenses were allowed till the Lieutenant-Governor had mastered the subject and saw his way to spending the money to the best advantage. The demands for jail buildings alone have now more than absorbed the previous saving in this department, and the expenditure for the current year must be altogether much heavier than previously.

The savings in the civil departments were principally the result of severe economy, except in the education department, where the considerable saving was a sort of surprise. That department was greatly wanting in any proper system of account; it did not know what it was spending, and did not utilise for fresh grants and other purposes considerable portions of the assigned grants which for various reasons had not been spent.

The balance at the credit of the Provincial Government at the end of the year 1871-72, excluding trust funds, &c., not at the disposal of the Government, was stated in last report to be Rs. 39,73,056, but after some further adjustments by the account department this amount was reduced to Rs. 38,66,952. This sum was made up as follows:—

	Rs.
Balances of what were formerly called local funds (principally the amalgamated district road fund) at the disposal of the local Government for distribution, as they stood at the commencement of the new financial system on 1st April 1871	15,96,774
Savings of the previous year 1870-71, made over by the Government of India as a working balance	5,32,900
Savings of 1871-72	13,96,332
Capitalised value of certain rents paid for public offices granted by Government of India to build offices	3,40,946
Total	<u>38,66,952</u>

Subsequent to the last report the Government of India ordered the Provincial receipts and disbursements, provincial accounts to be recast in a different form. The balance of the funds which were at the disposal of the local Government before the new system of provincial finance, with the receipts and expenditure of the same, are now kept apart under the head of provincial reserve, and are thus distinguished from the accounts of the assignments, receipts, and disbursements under the scheme of December 1870, which are now designated as provincial proper. Stated in this manner the accounts for 1872-73 stand as follows:—

Account of Bengal Provincial Receipts and Disbursements for the financial year 1872-73.

	RECEIPTS.	Rs.
Balance at beginning of year	...	38,66,952
I.—Allotment from Imperial Revenue	...	1,32,03,836
II.—Provincial taxes	...	Nil.
III.—Jails	...	7,77,702
IV.—Registration Department	...	4,34,657
V.—Police	...	27,918
VI.—Education	...	3,80,007
VII.—Printing	...	21,802
VIII.—Miscellaneous	...	2,39,190
IX.—Public Works	...	1,45,268
Total receipts, Provincial Proper	...	<u>1,52,90,380</u>
Receipts of Provincial Reserve	...	<u>10,87,615</u>
Grand total, Provincial receipts, 1872-73	...	<u>1,63,17,995</u>

DISBURSEMENTS.					Rs.
I.—Refunds	...	...	...	...	27,248
II.—Provincial taxes	...	...	...	...	Nil.
III.—Jails	...	...	...	...	16,82,453
IV.—Registration Department	...	...	...	...	3,05,189
V.—Police	...	...	...	...	45,39,047
VI.—Education	...	...	...	...	20,31,719
VII.—Medical services	...	...	...	...	11,36,289
VIII.—Printing	...	...	...	...	1,42,788
IX.—Miscellaneous	...	...	...	...	2,09,225
X.—Public Works	...	...	...	...	36,07,314
XI.—Office rents and municipal rates and taxes	...	...	...	...	1,60,545
Total disbursements, Provincial Proper					1,38,41,817
Expenditure from Provincial Reserve, viz.—					
Contribution to local funds	...	...	...	...	11,98,491
Other charges	...	...	...	...	5,20,891
					17,19,372
Grand total, Provincial disbursements, 1873					1,55,61,189
Balance of end of year					46,27,762

The following statement shows the receipts and disbursements and balance of the provincial reserve fund :—

Details of Provincial Reserve Fund for 1872-73.

Balance at beginning of the year	...	Rs. 15,96,774.			
RECEIPTS.					Rs. As. P.
Excess charges of Amalgamated District Road Fund of previous years written back	...	...	...	...	326 1 7
Dacca High Court bungalow	...	...	...	...	1,846 0 4
Plendship examination fees	...	...	...	...	26,848 8 0
Pounds under Act I of 1871	...	...	...	...	2,52,918 14 4
Police clothing receipts	...	...	...	...	42,124 10 8
Calcutta canal tolls	...	...	...	...	4,01,770 0 0
Nuddea rivers	...	...	...	...	2,19,376 0 0
Backergunge canal tolls	...	...	...	...	20,701 0 0
Ferries on provincial roads	...	...	...	...	96,897 8 6
Tolls on ditto ditto	...	...	...	...	9,472 5 0
Staging bungalows	...	...	...	...	6,344 5 6
Total	...	...	...	...	10,87,615 5 11
CHARGES.					
Excess receipts on account of Amalgamated District Road Fund of previous years written back	...	...	...	...	2,740 6 0
Police clothing	...	...	...	...	36,922 3 8
Pounds	...	...	...	...	97,785 15 4
Plendship and mooktearship examination charge	...	...	...	...	2,525 10 6
Dacca High Court bungalow	...	...	...	...	2,074 13 0
Calcutta canals	...	...	...	...	2,54,333 4 3
Nuddea rivers	...	...	...	...	71,258 5 8
Backergunge canals	...	...	...	...	3,809 7 0
Ferries on provincial roads	...	...	...	...	23,513 12 7
Tolls on " "	...	...	...	...	1,817 9 9
Staging bungalows	...	...	...	...	23,000 0 3
Total	...	...	...	...	5,20,881 0 0
Contribution to local funds...	...	...	...	...	11,98,491 0 0
Total disbursements	...	...	...	...	17,19,372 0 0
Balance at the end of the year	...	...	...	...	9,65,017 0 0

The Provincial balance at the end of the year comprised certain further grants for special buildings, being the value of the building lately occupied by the High Court and now transferred to the Military Department, and the capitalised value of the rents paid for various public offices in Calcutta. Both these sums, amounting in the aggregate to Rs. 8,66,000, are designed for the erection of new amalgamated public offices, and are held in deposit for that purpose. Deducting this sum from the balance (apparently increased by something over 7½ lakhs), we find that the expenditure of 1872-73 has exceeded the receipts by about one lakh of rupees, or Rs. 1,09,190. It appears, however, that as the accounts are now stated, there has been a saving in provincial proper of Rs. 6,22,563, and a deficit in provincial reserve of Rs. 6,31,657; that is, in fact, less than the income assigned by the Government of India has been spent in general provincial charges, and more has been assigned for local purposes than the local income.

The balance at the disposal of the Government of Bengal on 1st April 1873 may be stated to consist of the following :

	Ra.
Savings of 1870-71, 1871-72, and 1872-73	26,00,762
Balance of provincial reserve	9,65,017
Special assignments for particular buildings, amount unspent . .	10,58,000
Total	46,23,762

With regard to the economies of the first year of the new system of provincial income, the Lieutenant-Governor observed in a note, dated 6th May 1873 :

“As respects our saving at the beginning of the new system and the balance at our credit, I must distinctly claim that we are not the unprofitable servant who has hoarded, but the discreet servant who has doubled his talent. I consider that without material injury to the public service we have managed to establish in prosperous times a reserve fund such as is absolutely necessary to an efficient, free, and liberal administration. In my opinion the new system of provincial finance cannot be worked without such a reserve. If we had expended up to the utmost limit of our income; if we were living as it were from hand to mouth: how could we meet a rainy day? How could dear and unprosperous years be tided over?—how could we provide for any great work?—how could we undertake any of the thousand and one little improvements or occasional large improvements beyond the sanctioned routine which constantly present themselves? It never was a part of the scheme that the local Governments should have the power of borrowing, and I certainly think it should not be so; yet without either this power or a reserve I do not see how a Government with full establishment, and spending in ordinary times all its income, can possibly get over a bad year; and I am much convinced that one of the principal advantages of the system will be lost if the local Governments have so tightly fitted their regular and unavoidable expenditure that they cannot give money for occasional

purposes. Budgets and fixed establishments are excellent things to enable us to keep within limits and see how we stand, but I feel sure that more good can often be done by the discretionary expenditure of one rupee by an authority fit to be trusted with discretion, than by ten rupees spent by rule and budget. I should therefore always wish to have some margin for occasional and extraordinary expenditure."

Not only was the object thus set forth effected in 1871-72, but, notwithstanding the very slight apparent falling back in 1872-73, there is in reality some accumulation in the latter year also; for whereas formerly the unspent balances of sums assigned to the districts for local roads, &c., were recredited at the end of the year, under the new road fund system the assignments are permanent and are not recredited. The road year runs from 1st October to 30th September, and grants are made for that year, so that considerable balances remain in hand on 1st April. Thus it has happened that while our provincial balances at the end of 1872-73 had practically decreased by one lakh, the local fund balances have increased by upwards of 7 lakhs, liberal assignments having been made to the local funds.

With respect to the expenditure of 1872-73, it may be stated that all the civil services have been conducted with economy and within our means, except medical, the charges for which have much increased from exceptional circumstances. The Police, which last year slightly exceeded the estimate, has this year shown a saving to a considerable amount. Education has also again shown a saving on the estimate. Jails, Registration, Printing, and Miscellaneous, have shown no excessive expenditure. The cost of the Medical Services have rapidly increased on account of the Burdwan fever and the excessive special establishments entertained, while there was a very heavy charge for quinine supplied by the Government of India. Altogether the medical charges exceeded those of the previous year by Rs. 2,35,929. The provincial public works expenditure, excluding assignments to districts and charges against provincial reserve, was Rs. 36,07,314. This amount as nearly as possible tallies with the sums available for that department (some receipts being added to the imperial assignment), so that during 1872-73 we have neither gained nor lost by the Department of Public Works to any considerable extent.

Seeing that the object of securing a working balance had been attained, and that considerable sums were available, which it was well that we should cause to fructify; seeing also that considerable savings are almost always effected in the estimates in these provinces, the Lieutenant-Governor thought that he might frame the estimates for the current year 1873-74 on a more liberal scale. Especially in the Public

Estimates for 1873-74 framed on a more liberal scale.

Large increase of expenditure estimated for in Department Public Works.

Works Department the Lieutenant-Governor thought that some balances and savings due to that department might well bespent. The following resolution, dated the 18th March 1873, shows what has been done in that respect. It was drawn up before the new system of separating provincial proper from provincial reserve was intro-

duced, and includes the receipts and expenditure of the reserve, and the assignments from the general to the local funds :—

“**RESOLUTION.**—The Lieutenant-Governor having now seen most parts of these provinces, and having very fully considered their necessities in regard to public works, has thought it well to review the whole situation in this respect before settling the public works budget for the year 1873-74.

“The portion of the annual imperial assignment to these provinces calculated with reference to the public works expenditure of 1870-71, and therefore fairly attributable to that department, is about 33½ lakhs of rupees, say £335,000.

“The income from tolls on canals and water-ways, and on bridges, ferries, &c., levied on roads maintained from the provincial funds, is about 7 lakhs of rupees, and this income has been, and should be, devoted in some shape to public communications. From other sources, including rents, refunds, &c, there is some further public works income, making a total income in that department of about 8½ lakhs. The total ordinary income composed of the assignment, plus receipts of the department, is thus about 42 lakhs, say £420,000

“In clearing up the accounts of the amalgamated district road fund and other funds similarly available, with a view to the new system of account, there was found to be a credit balance of about 16 lakhs, which may be regarded as a sum available for expenditure once for all.

“The Government of India have agreed to give this Government the capitalised value of several rents paid for public offices, as well as the value of the building lately taken for a military hospital, the object being to supply the place of rented buildings by building Government offices. On account of these capitalised rents, including the Calcutta Small Cause Court and a Judge's Court at Midnapore, about 11 lakhs are now available.

“Finally, as has been explained in the Administration Report, not from the want of ample opportunities for spending, but because of the very greatness of the necessities of these great provinces, and the difficulty of meeting them from the comparatively small annual assignment, the Lieutenant-Governor thought it necessary in the first year of his administration to exercise extreme care and caution in this department, and not to launch out till he thoroughly understood the subject and had systematised and classified the works and the accounts. There resulted a considerable saving on the public works assignments for 1871-72, exceeding 7 lakhs of rupees

“These sums make about 34 lakhs of rupees, say £340,000, which may be called extraordinary funds available for public works. Taking ordinary and extraordinary together, about Rs. 76 lakhs, say £760,000, appear to be available.

“From this we have only to deduct any amount by which the grants-in-aid to districts in the present year may be found to have caused a deficit.

"It might not be absolutely necessary to devote all these funds to public works; some of them might perhaps have been diverted to other and equally useful purposes. But, on the other hand, several considerations have seemed to the Lieutenant-Governor to point to the course of devoting these funds for the present mainly to what may be called their original and primary object. It would scarcely be right to divert them without good reason. The necessities of public works in so vast a territory are greater than the funds as yet at our disposal can meet. And what has principally weighed with the Lieutenant-Governor is this, that in other departments he has not the power to incur, and it would not be right that he should incur, annual charges for which he might provide in one year, but for meeting which in future years no provision has been made, while in the Department of Public Works great benefits may be conferred by expenditure on works of a lasting character, and provision for the future is made, inasmuch as the road-cess may shortly be expected to supply an income from which works of a local character once made may be maintained, and the provincial assignment may be set free for larger works and other necessary purposes.

"If again this money is to be devoted to public works, it has seemed to the Lieutenant-Governor to be altogether for the benefit of the country that it should be made to fructify as soon as possible, instead of remaining idle in the treasury, which pays no interest. In anticipation of the new arrangements connected with the road-cess, and with a view to general efficiency, the public works establishments have been lately organised on a localised system, which has been attended with a considerable extension, and it is hoped greatly increased efficiency. Meantime the collection of the road cess has been postponed for some months, so that there is a sort of interregnum, during which our local establishments are ready but our local money is not. The Lieutenant-Governor has promised to enable the local officers to carry on the useful works they had taken in hand in expectation of the early collection of the road cess, and it is very desirable that he should provide the funds for this object.

"Looking, then, to the whole situation, it seems to the Lieutenant-Governor to be best that he should not hoard the money available, but should spend as much as the public works establishment can efficiently, economically, and usefully expend, drawing on the extraordinary funds at his disposal for so much as exceeds the ordinary income of the year.

"In this view the budget estimate of the Public Works Department has been drawn upon a comparatively liberal scale, though that scale is still extremely small in comparison to the territories, and will after all admit of but very moderate extension of necessary works.

"First, it is of course necessary to provide for the repairs of existing buildings, roads, &c. This has been duly done at a cost of about £125,600, of which £91,155 is devoted to the repair of roads and canals.

"Of new buildings, the most important addition to our ordinary outlay is the provision for jails. It may be said that not one properly

constructed jail existed at the beginning of the present financial year in all these provinces, and what has been done or can be done in a single year must be but a very small part of what is required. A sum of £68,757 has, however, been devoted to permanent improvements of our jails in the provision for the ensuing year, exclusive of establishments and repairs.

"A provision of £17,500 has been made to carry on the new Presidency College during the year.

"All the other building provisions from ordinary funds are comparatively small. A few new court-houses are being built at various district stations, but not nearly all which are demanded and are really required.

"There is, however, a considerable assignment for Secretariat Offices and the new Small Cause Court in Calcutta, which, as well as the provision for a court at Midnapore, will be met from the special funds obtained by grant from the Government of India by way of capitalisation of the rents now paid. About £61,700, in addition to a proportion of cost of establishments, &c., will be thus spent under the head of "other buildings," but will not form a charge against the ordinary income of the year. Adding together these charges, we have a total of £187,886 devoted to new buildings.

"In the last Administration Report, the principal roads and canals maintained as provincial are shown as now classified, and that list is appended to this resolution.

"Under the head of communications, the new works proposed involve an expenditure of £100,869, of which £9,154 is the sum given to canals, and the remainder to roads. The Lieutenant-Governor hopes to arrange for the further development of the water communications of Bengal, the existing canals being both useful and profitable. But the subject involves considerations of extreme difficulty; plans did not exist, and till they are carefully elaborated, much cannot be done. Particular attention is being given to the possible improvement, or even canalisation, of the Soorma, the river leading up to Sylhet and Cachar, and now navigable by steamer to those places in the rainy season only. The present budget already contains provision for the commencement of a canal to connect the Khasi Hills (abounding in minerals and potatoes) with the Soorma. Some improvements are proposed in the existing canals, and help has been promised to some of the local committees, especially those of Dacca and Chittagong, who contemplate important local canals to open the direct route between the Eastern Bengal Railway and Dacca, and to give access to Chittagong by a route free from the perils of the open sea.

"As regards roads, the principle followed has been to do most in those districts which, needing most development, are least able to help themselves. The Lieutenant-Governor has also felt that money is much better spent on substantial roads in districts where the supply of metal is good and cheap, and *where* roads once made can be easily maintained, rather than in those where passable roads can only be maintained at an enormous cost by continually laying down bricks which soon wear out. It generally happens, too, that the laterite districts are those most wanting in water communication, while the

alluvial districts, where there is no metal, have many waterways. The Lieutenant-Governor is inclined to think that in rich and populous districts where there is no metal, a light railway will prove in the end more economical, as well as incomparably more efficient, than a brick road wherever there is much land traffic. The question whether rails may properly be laid on some of the existing roads is one of much difficulty, which is still under consideration.

“With these views, then, the money available for new roads has been distributed as follows :—

	£
Calcutta roads	2,600
South-western trunk road	2,500
North-western „	2,900
Gya and Patna road	5,000
Chota Nagpore system of roads	25,400
Northern trunk road	22,600
North-eastern road	1,200
Assam roads	21,000
Sylhet and Cachar road	3,000
Chittagong road	500
Minor road works	5,000
Total	91,700

“An important bridge is in course of construction on the road between Patna and Gya, the great place of pilgrimage. When this is finished, that road will be complete, metalled and bridged throughout. It is possible that rails may eventually be laid on this road, on which the traffic is very large.

“The road from Caragola on the Ganges above Rajmehal to Purneah and Darjeeling has long been in a partially completed state, the communication being generally maintained by temporary bridges which are now falling. Seeing that this road lies through rich and important districts, that it is so far from the course of the proposed Northern Bengal Railway that it will not be superseded by it for local purposes, and that it must be some years before it can be superseded by that railway for the traffic between Calcutta and Darjeeling, the Lieutenant-Governor has thought that this road should be maintained, and that whatever is to be done should be done as quickly as possible, in order that the greatest amount of use may be made of it before the railway comes into play. He has therefore much urged on the completion of the light iron bridges which are taking the place of the wooden ones fallen or falling. He has also not hesitated to complete the hill cart road, which has been much injured by land slips, and needs much remodelling and improvement. Upwards of £22,500 is thus devoted to the Ganges and Darjeeling road, taking both the plains and hill portions.

“The bridges in the plains portion are calculated to bear a light engine in case rails should some day be laid. If in this way direct communication could be established between the western cooly-producing districts and the Northern Bengal Railway, and a branch of the latter should lead to Assam, a great step would be gained towards developing the eastern districts and saving the lives of the hundreds of coolies who now perish by cholera and other diseases in the river steamers.

"Whether a railway shall be made up the Assam valley, the Government of India must decide. But the Lieutenant-Governor is decidedly of opinion that nothing but a railway scale of expenditure will suffice to make a trunk road fitted to compete with the river traffic, and that a railway only would recompense such expenditure. He has therefore not attempted seriously to carry on what is called the Assam grand trunk road, but has given about £10,000 for the improvement of such portions of it as are of much local use, and for the completion of a line sufficient for the postal runner. He has given another £10,000 to be distributed in opening local roads in the tea districts. Altogether £21,035 have been given in the budget for 1873 for new roads or new works on roads in Assam.

"The Chota Nagpore districts are in many ways most important; with a fine climate, an excellent and most productive population, most valuable minerals and other products, and two military stations, it is very important that they should be opened out, and should no longer be cut off from the world, as they have hitherto been. While there is no water communication, the soil is admirably adapted for good and cheap roads; bridges only are required to render these districts accessible by roads very easily maintained. The Lieutenant-Governor has then thought it right to do something for this object, and proposes to complete two lines of communication from Giridi to Hazareebagh, and then to Ranchee on one side, and from the railway junction near the Barakur to Purulca and Ranchee on the other, while the district committees will carry further roads of a humbler character. Altogether £25,400 is given for the construction of the Chota Nagpore system of roads.

"Road works of less size and importance in various places, including some improvements in Calcutta, the completion of causeways on the unbridged rivers on the south-western trunk road to Cuttack, and the Sylhet-Cachar road, absorb the remaining £18,000 of road money.

"The sum of £20,000 is provided in the budget for miscellaneous public improvements of all kinds.

"For grants-in-aid to local committees, the sum of £100,000 is provided

"All the sums above detailed are for works exclusive of the establishments by which they are carried on and superintended; about 25 per cent. of the cost of works must be added for establishments. And it must be explained that the public works establishments now do a large portion of the district committees, which work is not shown in the provincial budget. For the present, while the funds of the committees are so limited, no charge is made on them for this service. In practice therefore this is an addition to the grants to districts.

"For the cost of establishments, then, £131,400 is provided, as well as £6,055 for tools and plant.

"The total charge to the provincial revenues under the above heading, as set forth in the abstracts attached to this resolution, is £671,899.

“For this expenditure the Lieutenant-Governor proposes to provide as follows :—

	£
Current annual assignment and income	420,000
From capitalised grants, including share of establishment, &c., debitable to buildings constructed from this source	80,000
From accumulated balances of amalgamated road fund	100,000
The balance from the savings of the year 1871-72	71,899
Total ..	671,899

“This leaves some margin as compared to the total sum above mentioned as available, and it generally happens that some unspent balances remain at the end of the year. It may therefore be hoped that as much work is provided as our establishments (which are not yet quite completely consolidated,) can safely and thoroughly do, while at the same time there is no risk of exceeding our means.”

“List of the principal roads and water communications maintained from provincial funds.”

ROADS.

1.—*Southern Road.*—From Calcutta through the 24-Pergunnahs district to Diamond Harbour, the head-quarters of a sub-division, and the site of one of the new batteries for the defence of the River Hooghly.

2.—*South-Western Trunk Road.*—From Calcutta by Midnapore through Orissa, bifurcating from a point near Cuttack to Ganjam in the Madras Presidency and Pooree, the site of the great Temple of Juggernath; including also a more direct connection with the above line from the North-Western Provinces by a branch leaving the East Indian Railway station at Raneegunge and passing *via* Bancoorah to Midnapore.

3.—*North-Western Trunk Road.*—From Calcutta to the frontier of the North-Western Provinces. In connection with this a road leads to Gya, the great place of Hindoo pilgrimage, and connects Gya with the city of Patna and the East Indian Railway. From Patna again a road leads on to Mozufferpore, the chief town of the great district of Tirhoot.

4.—*The Chota Nagpore system of roads.*—Consisting of a line of road from the Seetarampore junction of the East Indian Railway to Purulia, the chief town of the Maunbhoom district, and on to Ranchee, head-quarters of the Chota Nagpore Commissionership. And another line from the Giridi terminus of the East Indian Railway to the cantonment and district station of Hazareebaugh, with a junction line between Hazareebaugh and Ranchee. Also a line from Hazareebaugh running north to the Grand Trunk Road. There is also a short branch to Parasnath Hill.

5.—*Northern Trunk Road.*—From Caragola on the Ganges, nearly opposite the East Indian Railway station of Sahebgunge, through Purneah to Darjeeling with a branch to Julpigoree.

6.—*North-Eastern Trunk Road.*—From Calcutta by the Military Station of Dum-Dum to Jessore, the chief town of the Jessore district.

7.—*Assam Trunk Road.*—From Dobree on the Berhampootra, on the extreme west of Assam, to Suddya near the eastern frontier, with a branch to Shillong and Cheerapoonjee, and hill roads to different outposts on the Garo, Khasi and Naga Hills.

8. *Sylhet and Cachar Road*.—From the station of Sylhet through Cachar to the Muneepore boundary, and a short branch line from Sylhet to Cheerapoonjee.

9. *South-Eastern Trunk Road*.—From Dacca to Chittagong, with a continuation to the Looshai Hills and another towards British Burmah.

CANALS.

1. *Calcutta and Eastern Canals*.—A system of canals connecting various rivers and creeks by which boat communication between Calcutta and the eastern districts is maintained.

2. *The Nuddea Rivers*.—One or other of these is kept open according to circumstances, so as to afford water communication between Calcutta and the northern districts.

“Summary of the estimated charges for public works for the year from 1st April 1873 to 31st March 1874.”

		Original works.	Repairs.	Establish- ments.	Total.
		Rs.	Rs.	Rs.	Rs.
Civil buildings	Jails	6,87,579	67,670	1,88,812	9,44,061
	Registration ...	30,000	..	7,500	37,500
	Police ...	50,000	2,940	18,235	66,175
	Education ...	2,00,000	32,450	58,112	2,90,562
	Medical ...	52,000	15,000	16,750	83,750
	Other buildings ..	8,59,290	2,07,240	2,61,039	13,27,569
Total ...		18,78,869	3,25,300	5,45,438	27,49,607
Communications	Roads ...	8,17,156	7,00,750	4,69,973	23,90,221
	Canals ...	91,542	97,300		
	Rivers ...	..	53,500		
	Stores from England ...	1,00,000	.....	
Total ...		10,08,698	9,11,550	4,69,973	23,90,221
Miscellaneous public improvements		2,00,000	20,025	53,850	2,73,875
Total ..		2,00,000	20,025	53,850	2,73,875
Tools and plant ...		.....		...	60,580
Grants-in-aid to districts, &c. ...		10,00,000		2,44,746	12,44,746
Total Provincial ..		53,44,442		18,14,007	67,18,999

"Abstract of the Provincial Public Works Budget Estimate of Bengal, showing the estimated receipts and expenditure during the year 1873-74.

RECEIPTS.						Amount.	Total.
						Rs.	Rs.
<i>Tolls—</i>							
On Ferries	...	...	...	...	...	70,000	
" Roads	...	...	...	...	...	7,000	
" Nuddea rivers	...	...	...	...	...	2,57,000	
" Calcutta and eastern canals	...	...	...	...	...	3,66,000	
							7,00,000
<i>Other Receipts—</i>							
Fines and refunds	...	...	...	...	...	50,500	
Rent of buildings and lands	...	...	...	...	...	64,000	
Sales of produce	...	...	...	...	...	1,500	
" of buildings and tools and plant	...	...	...	...	...	13,000	
" of old materials	...	...	...	...	...	16,000	
Staging bungalow receipts	...	...	...	...	...	9,000	
Strand bank fund	...	...	...	...	...	40,000	
							1,94,000
Net grant from provincial funds	...	...	...	...	.....		58,24,999
							67,18,999

EXPENDITURE.						Amount.	Total.
						Rs.	Rs.
<i>Original Works—</i>							
Civil buildings	...	...	...	...	18,78,869		
Communications	...	...	...	...	10,08,698		
Miscellaneous public improvements	...	...	...	...	2,00,000		
						30,87,567	
<i>Repairs—</i>							
Civil buildings	...	...	...	...	3,25,300		
Communications	...	...	...	...	9,11,650		
Miscellaneous public improvements	...	...	...	...	20,025		
						12,56,875	
Establishments	...	...	...	...	13,14,007		
Tools and plant	...	...	...	...	80,550		
Grants-in-aid to districts	...	...	...	...	10,00,000		
							67,18,999"

The result of the arrangements here described is that in addition to the assignment for the year and public works receipts (proper and reserve) there would be, if the assignments are fully spent in the year 1873-74, an excess expenditure in the Public Works Department of Rs. 17,18,990.

The site for the amalgamated public offices not having been settled, most of the money assigned from special grants has not been spent; but as it is still held as a special deposit, that does not affect the general account.

There seems reason to expect that, as things have hitherto progressed, the remainder of the public works grant for the year will be fully spent. At a time when we are largely extending public works for relief purposes, it is not found that there are many public works which can be stopped for the sake of economy. Though ordinary earthwork is the easiest form of relief, all building operations give

employment to many poor people in dear times such as we now have. The larger buildings in hand are approaching completion, and for necessary buildings not commenced the making of bricks is both indispensable and an excellent employment for the poor. It is thus only in the few districts where the crops are still in good condition that some works can be stopped. On the other hand, for the purposes of relief, it has already become necessary to make additional grants to distressed districts, and many such grants must be made on a liberal scale, which will both exhaust the available public works fund of this Government and necessitate an application to the Government of India. The whole expenditure on public works in the current year must be thus very large.

As regards the civil expenditure, the extracts from the general budget resolution dated 29th March 1873 and statements reproduced below will show the assignments for 1872-73 and 1873-74 in juxtaposition. The balance of 1872-73 having been estimated before the account was finally closed, does not exactly correspond with the figures previously given, being Rs. 1,06,104 in excess of the truth.

Estimate of civil receipts and expenditure.

“RESOLUTION.—The appended statement A shows the provincial ways and means, and the estimated provincial expenditure for the year 1873-74.

Resolution on budget for 1873-74. The orders on the several departmental budgets have been published in the *Calcutta Gazette*, and it is therefore unnecessary to review again in detail the estimated receipts and expenditure of the several provincial departments. The Lieutenant-Governor will therefore now only notice very briefly the general scope of the provincial budget as it finally stands.

“In statement A the expected income from “provincial rates and taxes” is *nil*, as no such taxes have been imposed in Bengal. The only sources of income that could in any sense be reckoned as provincial taxes are the tolls on roads, rivers, and canals, which formerly constituted the amalgamated road fund. All the local tolls on roads, canals, &c., locally maintained, have now been made over to the district local funds, while those levied on roads and canals maintained by the Public Works Department are properly treated as public works receipts, and set against the expenditure on those works.

“The only grants for the year 1873-74 which largely exceed the allotments made in the previous year, are the education, the medical, the public works, and the local funds grants. The Government orders on the departmental budgets have shown how and why the Government propose to spend these increased grants on education and medical or sanitary relief. The Lieutenant-Governor much wishes that he could grant more money for, and that the educational machinery of Government could usefully spend more money on the schools of Bengal. He is glad to be able to spend so much on medical relief and sanitation. The orders on the Public Works Department’s budget show that the Lieutenant-Governor wishes to spend the accumulation of moneys primarily intended for public works on roads, canals, jails, and other public works, so that the provincial money may fructify instead of lying idle. A large allotment (£100,000) is made to meet the grants which the Lieutenant-Governor will still have to make during the year

in aid of the funds of district and municipal committees. The road cess income will not be available in some districts until late in the year; there are still some remote and poor districts which have little local income, and which must receive provincial grants for some time to come. The Lieutenant-Governor has considered that he could not spend the balances of the old amalgamated road fund in any better way than granting money in aid of the district committees and towards some very special improvements in certain municipalities.

"Statement B shows in detail how the grants for the several provincial services have decreased or increased as compared with the previous year.

"Statement C shows exactly the gross and the net cost of each of the great civil departments inclusive of public buildings.

"If the full grants now made are spent, and the account is not materially deranged by the final result of the year 1872-73, the year 1873-74 will close with a balance of £183,000 against an opening balance of £483,000. Some savings in the estimates generally result at the end of the year, even after providing for demands which arise in the course of the year, and if this be so, the balance will be so much larger. But however this may turn out, the Lieutenant-Governor believes that he will have been right, now that the wants of the province are more fully known to him, to make liberal grants for 1873-74, for the most necessary objects, out of the provincial balances which are lying at his disposal in the treasury, care being at the same time taken that he does not exceed his means."

STATEMENT A.

"Showing the funds available and the assignments for each of the Bengal Provincial Services during the year 1873-74.

Estimated balance in hand at beginning	£	£
of year .. .. .	.....	483,900

RECEIPTS.

Imperial assignment for provincial services	1,224,600
Provincial rates and taxes	<i>Nil.</i>
Police department receipts	7,820
Jail manufacturing receipts	101,300
Registration fees	40,000
Educational receipts	39,650
Medical receipts	9,070
Printing receipts	2,240
Miscellaneous civil receipts	37,800
Public works receipts	89,400

Total receipts	1,551,880
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Grand Total	2,035,780
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CHARGES.

	£
Police	486,590
Jails	174,850
Registration	33,300
Education	268,940
Medical	115,570
Printing	28,330
Miscellaneous civil expenditure ...	72,550
Provincial public works, including departmental buildings ..	571,900
Grants-in-aid to local and municipal funds for local works ..	100,000
Total ...	1,852,030
Estimated closing balance ...	183,750
Grand Total ...	2,035,780

STATEMENT B.

“ Showing the gross assignments for each of the Bengal Provincial Services during the years 1872-73, 1873-74.

DEPARTMENT.	ASSIGNMENT FOR THE YEAR.		Increase 1872-73	Decrease. 1872-73.
	1872-73.	1873-74		
	£	£	£	£
Police	479,630	486,590	6,960	.
Jails	180,200	174,850	... ..	5,350
Registration	33,600	33,300	. ...	300
Education	232,960	268,940	35,980	.....
Medical	100,000	115,570	15,570	.....
Printing	31,300	28,330	.....	2,970
Miscellaneous civil expenditure ...	76,410	72,550	.....	3,860
Provincial public works	342,740	571,900	229,160	.....
Grants to local and municipal funds	Nil	100,000	100,000	.....
Total ...	1,467,840	1,852,030	387,670	12,480

STATEMENT C.

" Showing the expected net cost of the Provincial Services of Bengal for the year 1873-74.

POLICE.

	£
Grant as per statement A	486,590
Add cost of buildings and repairs included in the Public Works budget, plus 25 per cent. for establishment	6,610
Total ..	493,200
Deduct receipts as per statement A ..	7,820
Net cost ..	485,380

JAILS.

Grant as per statement A	174,850
Add cost of buildings included in the Public Works budget, plus establishment as before	94,410
Total ..	269,260
Deduct receipts as per statement A ..	101,300
Net cost ..	167,960

REGISTRATION.

Grant as per statement A	33,800
Add cost of buildings and repairs included in the Public Works budget, plus establishment as before	3,750
Total ..	37,050
Deduct receipts as per statement A ..	40,000
Net saving ..	2,950

EDUCATION.

Grant as per statement A	268,940
Add cost of buildings and repairs included in the Public Works budget, plus establishment as before	29,050
Total ..	297,990
Deduct receipts as per statement A ..	39,650
Net cost ..	258,340

MEDICAL.

	£
Grant as per statement A	115,570
Add cost of buildings and repairs included in the Public Works budget, plus establishment as before	8,375
Total	123,945
Deduct receipts as per statement A	9,070
Net cost	114,875

PRINTING.

Grant as per statement A	28,330
Deduct receipts as per statement A	2,240
Net cost	26,090

MISCELLANEOUS CIVIL EXPENDITURE.

Grant as per statement A	72,550
Deduct receipts as per statement A	37,800
Net cost	34,750

PROVINCIAL PUBLIC WORKS.

Grant as per statement A	571,900
Deduct receipts as per statement A	89,400
Net cost	482,500

GRANTS-IN-AID TO LOCAL AND MUNICIPAL FUNDS.

Grant as per statement A	100,000
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The following extracts from the Lieutenant-Governor's note of 16th May 1873, already alluded to, will further explain the estimates for 1873-74.

The Lieutenant-Governor's financial note, dated 16th May 1873.

"The large public works grant for 1873-74, which far exceeds the income of that department, is abnormal, and avowedly made to utilise once for all, for jails, roads, and other pressing necessities, the available public works balance. In this department we can in fact cut our coat according to our cloth, and may spend as much as, and no more than, we have to spend. I will therefore exclude the public works grant for 1873-74 from the following comparison.

"Till we have fresh sources, we must, I fear, make out of the Registration Department the surplus of Rs. 60,000 per annum which the Government of India has deducted from our general grant, the

registration buildings being, however, charged to public works ; but since, as I have said, we do not seek to make a further profit from registration, and the minus quantities of this small department embarrass the accounts, I will leave it out.

"These things then being put on one side, I take for the purposes of comparison the main civil departments of the administration comprised in the present scheme of provincial finance, jails and printing, police, medical, and education.

"The following shows the imperial assignments for these heads of services, and the grants made for the same services for 1873-74.

"Statement showing the Imperial Assignments and the Sanctioned Grants for each of the Principal Departments of the Bengal Provincial Administration for 1873-74.

DEPARTMENT.	Annual imperial assignment.	Net budget grant for 1873-74.*	Excess of grant over imperial assignment.
	Rs.	Rs.	Rs.
Jails and printing	9,68,807	9,96,400	27,593
Police ...	45,96,830	47,87,700	1,90,870
Medical ...	9,34,730	10,65,500	1,30,770
Education ...	17,75,477	22,92,900	5,17,423
Total	82,75,844	91,42,500	8,66,656
Add grant for subordinate establishments			1,00,000
		Total ...	9,66,656
Deduct grant of Government of India on account of jail profits ...	...	...	4,50,000
Actual excess of expenditure			5,16,656

"The two departments of jails and printing have been lumped together, because they are so intermixed that this mode of treating them saves a great deal of perplexity and explanation in the figures. The chief printing income is the value of Government work done for the various departments in the Alipore Jail, which has sometimes been credited to jails and sometimes has not been so credited, the real amount not being easily ascertained, and the whole being merely a book debt—a matter of transfer in accounts, and not one of actual payment. In the original assignment, too, a comparatively large grant

* The receipts being deducted from the gross expenditure.

was made for printing, but this was arrived at by the previous practice of charging exorbitantly for jail work done for Government offices; while, on the other hand, these large printing charges being credited to jails, were deducted as receipts before the jail assignment was made, diminishing by so much the net grants. Thus while the printing grant was unduly swelled, the jail grant was unduly diminished. It comes to the same thing in the end; but if the two were shown separately, the figures would be distorted, whereas by putting them together the combined result is fairly shown.

"Possibly, as generally happens, the actual expenditure may fall a little short of the grants, but the estimates are now made much more closely and exactly than formerly; and as there is no provision for occasional and unforeseen charges arising during the year, and these must be met out of savings, it cannot be expected that the eventual savings will be large.

"Let us take each of the departments shown in the statement.

"If the ensuing season should be as favourable as the three last past, if prices should give as little temptation to crime and make the keep of prisoners as cheap, it is probable that the small excess under the head of jails and printing will be met by savings, and there will be no deficit then. Still there has certainly been some increase of jail establishments and of the net cost of jails as compared with 1871-72. All that has been said and done as regards our prison system, and the reform of the previous disposition to sacrifice everything to profit, has shown that to some extent this must be so. Hitherto the principal increased cost has been under jail buildings charged in the Public Works Department. But as central jails and other buildings are completed and methodised we must have establishments to manage them, and discipline with punitive labour may prove in some cases less profitable than a lax manufacturing system. A year of scarcity and dearness would certainly involve greatly increased expense both in the number of prisoners and in their cost.

"If we effect some economies in printing, on the other hand statistical inquiries and returns, and greater administrative activity, must involve some additional printing expenses.

"Altogether we may, I hope, tide over for the present in jails and printing, and need not now calculate on any considerable deficit; but I much apprehend that sooner or later the assignment must be exceeded, perhaps largely so.

"The Bengal police came into my hands on a totally different financial position from some other departments, in which casual vacancies and other accidents generally caused some saving out of sanctioned grants. The police budget had just undergone a very stringent reduction under orders of the Government of India, consequent on the financial crisis, requiring its reduction at all hazards to a sum strictly fixed. It turns out that the officers compelled to make these reductions being very hard pressed, struck out of the budget several considerable items on account of charges which necessarily must be, and always have been incurred, trusting to the casual vacancies and savings in

Police.

other items to meet these charges, so that any possible savings were in fact discounted. In addition to this the percentage further taken by the Government of India from the amount already reduced to what was supposed the lowest possible limit, took away some 2 lakhs at least from the police assignment. Thus it was that with every possible economy, and in spite of some further reductions by the present Lieutenant-Governor, the police expenditure in the minimum year 1871-72 somewhat exceeded the assignment.

"There has since been some unavoidable increase of police charges. We have in fact conquered a new district in the Garo Hills, for which we are obliged to provide a quasi-military police force of an expensive character without receiving any extra allowance for it. The reductions of 1870 have put an end to the semi-military reserves which were till that time maintained in the districts; and since we are no longer able to draw on these district reserves for a quasi-military force when necessity arises, I am more and more convinced of the need of maintaining a really efficient frontier police at several points of our very difficult and exposed frontier, with which to deal with petty frontier difficulties for which it is not desirable to call in a military force.

"The detective department was abolished in the reductions, and the water police, with the boat equipment necessary to patrol the great rivers in which boat dacoities (not always reported and very seldom detected) too frequently occur, are in a most inefficient state, urgently requiring a reform which involves fresh expense. In spite then of the reduction of a few European officers, the police expenditure has increased, and I fear must increase. The ordinary police is certainly not too numerous, and is not sufficiently equipped for locomotion. I do not see how the expense can be reduced without some very radical change. If I were quite free to deal radically with Act V of 1861 in the Bengal Council, possibly some savings might be effected by much change of system. But, considering the very great extent and population of these territories, the enormously long frontier we have exposed to wild tribes entirely beyond our control, the unpopularity of the police service in Bengal, and the necessity of paying high for efficiency, the severity of the reductions already made, and the objections there might be to radical change of system, I am not sanguine that the Bengal Police can be otherwise than a charge in excess of the assignments. Certainly in 1873-74 there must be a considerable excess of charge, and the tendency will be to increase of that excess.

"It would not have been possible to continue long the cessation of new grants-in-aid to dispensaries and the Burdwan fever, both involved heavy expense, and brought the subject of medical aid to the people into such prominence that it was impossible to do otherwise than to give some general extension of medical assistance. I am free to confess that in this department I have not exercised so severe an economy as in others, and the expenses have consequently increased to a very considerable extent. In 1872-73 the Government of India gave a contribution of one lakh of rupees towards the special expenses of the Burdwan fever, but the permanent expenses of that and other districts remain to us, and an excess of expenditure over

Medical.

the assignment is inevitable. On the whole, with every economy and saving, I fear that in 1873-74 we must draw on the reserve of Rs. 4,50,000 to the extent of say at least 2½ lakhs for excess in police and medical expenditure.

“There remains education, in which in 1871-72 the greatest saving, but in 1873-74 the greatest excess, of expenditure appears.

Education.

“The educational situation may be stated thus :—For the old forms of Government assistance to education—colleges and higher and middle schools and superintendence—grants have been made on the whole to about the same amount as in 1870-71 and 1871-72; and greater activity having been infused into the department, these grants are likely to be more nearly spent where formerly they were not spent. The grants being made on the same scale as before, while the Government of India has deducted a percentage, there is here a deficit of about a lakh of rupees. Then I have added to the previous miserably small assignment for primary schools 4 lakhs of rupees in all, or £40,000, making a total grant of £53,000 devoted to primary schools.

“The total excess of the grant for education over the imperial assignment is something over 5 lakhs. Probably there may be some saving, notwithstanding it has been found that the extension of primary schools inevitably involves a large extension of a suitable inspecting agency which had not been provided for. I should put down the probable actual excess of educational expenditure for 1873-74 at say 4 lakhs, or £40,000. Towards this a lakh may be taken from the reserve of Rs. 4,50,000, making an actual deficit of say £30,000. To meet this deficit we must, if necessary, draw upon our cash balance.

“As this is, however, not a charge once for all, but one which will, if the schools are continued, annually recur, I admit that I am not strictly justified in incurring so considerable an expense for primary schools without having first provided the means of continuing them. When I first arranged for this expenditure in September 1872, I said that while our economies enabled us to meet it for some time to come, I hoped that eventually, under the operation of the Municipal Bill, towns and large prosperous villages would relieve the Government of a considerable share of the educational burden now borne by it, and that the road cess would set free some of the money hitherto devoted to material improvement; and I hoped that in this and other ways the means would somehow be forthcoming for continuing these schools and gradually pushing forward education in the poorer and more backward places.

“With respect to the road savings, I had previously, in August 1871, at the time of the passing of the Road Cess Bill, very distinctly said much what I said in September 1872, viz. that there would be some saving in the road allotments hitherto made to favoured districts, which would be able to help themselves by a road cess assessment. However, I confess that I made a mistake, and that things have turned out otherwise than I hoped. with the result that a large portion of the primary school grant is unprovided for. Fortunately the balance which I had secured before launching out enables us to

meet the charge for the next year or two; and my consolation for the miscalculation is that I feel that, as a matter of fact, these schools are established, and to some degree the disgrace of our utter neglect of primary education is removed. I fully believe that they will not, and cannot, be permitted to lapse. If I had sought for more certain security for the necessary income, and carried on a prolonged correspondence on the subject, the schools would not have been established, and we should in that respect have been just where we were. I lately caused to be published a plan of Sir J. P. Grant very similar to my own, and there was Lord Hardinge's plan before that; but through all these years and all these plans nothing material has been done, because no grant for the purpose could be obtained, all the money given being absorbed by the higher education. If, then, I have rendered myself obnoxious to censure, I must still feel that I have effected something that was urgently needed, when those who acted according to rule failed to do anything effectual.

" Out of the reserved Rs. 4,50,000, one lakh has been assigned to meet half the cost of the new subordinate establishments for sub-divisions, the Government of India having agreed to pay the other half in consideration of certain specified services hitherto charged to imperial account. I am very confident that the comparatively small sum devoted to these establishments is very well expended on a most important addition to the executive efficiency of our district machinery.

" The statement shows that the grants for 1872-73 exceed the income by Rs. 5,16,656, say £51,000. Possible savings in excess of expenditure for unforeseen demands may reduce this deficit to £30,000. If I spend money beyond this for unforeseen or occasional purposes, that also must come out of the balance which I had accumulated. So far, however, as we can yet calculate, it comes to this that the expected deficit of £30,000 is just the amount of my last grant for primary schools [£10,000 previously given being provided for], and thus that extension of primary instruction is all that we have to meet so far.

" The result of the whole review is that, excluding public works, I expect a deficit in the current year of £30,000, or say from £25,000 to £40,000; we cannot yet calculate quite exactly. We might thus carry on for two or three years, if things remain prosperous and seasons favorable, the balance which I think necessary for prudence disappearing meantime. But at the end of that time, at any rate, and before, if a bad year or anything unusual were to come, we should have a deficit. By reductions of grants and economies we have been so much reduced to the lowest financial point, while the increase of demands is so constant, with a progressive Government and civilisation, that I cannot but anticipate that the deficit must continually increase unless things are thrown back by another radical change, our schools abolished, our dispensaries closed, and many other improvements abandoned.

" In my opinion Bengal is already much under-governed and under-cared for, and these things should not be reduced. I must submit then my view that, in Bengal at any rate, the financial policy

which, ripened and matured throughout a long series of years, was carried into effect by the late Lord Mayo's Government, cannot safely be abandoned. That policy I have

Policy in regard to taxation.

understood to be to give to the people or their representatives certain powers of local taxation for local improvements which are beyond the means of the general Government to supply or supervise. I see Mr. Laing is quoted as having first given a definite formal expression of that policy in 1861, when he was financial minister. He said the language of the Government was this: "Take what we are able to give you, and for the rest take certain powers of local taxation and deal with it yourselves." That is the policy on which the late Viceroy's Government strongly insisted, and which I have endeavoured to carry out. I venture to give my humble opinion that in Bengal no such provision for the necessary services and improvements has yet been made as to enable us with prudence to depart from that policy, and to announce that no further local or other taxation is required.

"As regards the particular subject of primary education, I must observe that not only is there a deficit of £30,000, caused by the total assignment of £53,000 to this purpose, but also that this sum, as the grant for the education of 65 millions of poor people hitherto left without education to a degree which I must call disgraceful to a Christian nation, is in fact a mere drop in the ocean,—a contribution of the very pettiest character. It is true that the machinery is so wanting that even this sum may be as much as we can this year effectively use as a beginning; but if we are to prosecute the system, this small beginning should very rapidly expand into many times the amount, increasing in a geometrical ratio. If we can well spend £50,000 this year, we may spend £100,000 the next, and £200,000 the year after that, and so on. The petty grant which I have made was intended to be a beginning only, and not an end. As yet, then, no real provision is made for primary instruction in Bengal. I believe this is literally the only province in India in which there is not local taxation, more or less compulsory, applicable to primary education. In other provinces if there is not an educational cess, there is a general cess, of which a large portion may be, or must be, devoted to primary education. I have already submitted to the Government of India and Her Majesty's Government the fact that, after long years of discussion, we are still just where we were in regard to any permanent or substantial provision for primary instruction; and a principal object in my now submitting this explanation of the actual condition of our local finances is to afford the fullest information in dealing with that subject. I do earnestly trust that this educational difficulty will be fully considered, and that on a consideration of the whole state and prospects of our Bengal finances in some shape or other adequate provision will be made for primary instruction."

It has been explained in previous reports that no new provincial tax (as distinguished from the Local Road Cess) has been imposed in Bengal since the power of provincial taxation was accorded by the resolution of December 1870. This policy has still been followed. The provincial income still consists only of the funds assigned by the

Government of India, the departmental receipts from jails, printing, education, &c., similarly assigned, and a small income which this Government before enjoyed, and which is now credited as provincial reserve.

The following extract from a report submitted to the Government

Relative incidence of provincial, local and municipal taxation in Bengal and other provinces.

of India in June 1873 shows the relative incidence of provincial, local and municipal taxations taken together in

Bengal as compared to other provinces of India as nearly as could be calculated.

"I am now to come to the comparative incidence of provincial, local and municipal taxation, taken together on the whole population of the several provinces outside the Presidency towns and under settled British Government.

"The provincial and local taxation figures for the Punjab may perhaps be open to doubt; for the Punjab figures are wanting in the Blue Book, and the Lieutenant-Governor has been obliged to adopt for the purposes of the present letter the figures originally submitted by the Government of the Punjab, but discarded from the Blue Book. The result of the calculations is as follows:—

	Total population outside the Presidency towns and Kurrachee, and exclusive of feudatory states.	Exclusive of Presidency Towns and Kurrachee.		
		Total income from provincial, local and municipal taxation.	Incidence of total provincial, local and municipal taxation per head of the population.	
	Souls.	Rs.	Rs. A. P.	or in English money.
Bengal	64,000,000	30,12,369	0 0 9	1½d.
Madras	31,000,000	69,03,614	0 3 6½	5½d.
Bombay	13,250,000	41,17,129	0 4 10	7½d.
North-Western Provinces	31,500,000	85,93,555	0 4 4½	6½d.
Punjab	19,500,000	69,29,473	0 5 6	8½d.
Oudh	11,500,000	13,51,032	0 1 10½	2½d.
Central Provinces	8,250,000	14,77,023	0 2 9	4½d.
Bengal (as it may perhaps be two years hence, when the road cess comes regularly from nineteen districts.)	64,000,000	42,00,000	0 1 0½	1½d.

"It will be seen that in Bengal the pressure of provincial, local and municipal taxation on the people is very much lighter than in any other province of India. An average subject of the Queen in Bengal has to pay in the shape of provincial, local and municipal taxes 1½ of a penny per annum; he has to pay two and a half times as much in Oudh; nearly four times as much in the Central Provinces; almost five times as much in Madras; nearly six times as much in the North-West Provinces; more than six times as much in Bombay; and more than seven times as much in the Punjab."

Lighter in Bengal than elsewhere.

The following statement shows the various funds to the provincial credit at the end of the year 1872-73 as stated by the Accountant-General:—

	Rs.
Provincial balance, including provincial reserve and deposit for special buildings, as above explained	46,23,762
Local funds	12,75,398
Municipal funds	1,40,914
Various petty trusts	41,463
	<hr/> 60,81,535
Deduct debt heads	88,495
Total balance ...	<hr/> 59,93,040

LOCAL FUNDS.

In last year's report it was shown how exceedingly light the local taxation of Bengal really is. Even when the road cess is levied, the amounts locally raised in these great provinces will still be very small, compared to the large sums which constitute the local funds of other provinces, and which are principally an addition to the land revenue. The statement given at page 19, Chapter I of this Report, shows how light the municipal taxation of Bengal is compared to that of other provinces, and further details will be found in this chapter under the head of Municipal Revenues.

Outside the towns possessed of municipal institutions, it may in fact be said that hitherto there has been almost no local taxation unless some tolls levied on canals and roads maintained by Government be considered taxation. The existing petty rate for the zemindary post has hitherto been the *only* rate on the land of Bengal. The following statement shows the local fund receipts, expenditure and balances for the year 1872-73, as stated by the Accountant-General:—

Statement of Receipts and Charges and Balances of Local Funds for 1872-73.

RECEIPTS.

	Rs.
District road funds	20,27,535
Rates on wards' attached and other estates	59,534
Charges of attached estates	3,725
Government estates' improvement fund	1,00,078
Zemindary post fund	2,23,200
Encamping ground grazing fund	501
Serai fund	652
Juggernath road fund	3,051
Copying fee fund	13,994
Poorce pilgrims' fund	5,327
Circuit-house fund	12,969
Town improvement fund	26,346
Bazar fund	2,559
Cantonment fund	30,661
Marine funds	76,053
Customs confiscation fund	13,752
Salt reward fund	12,087
Strand Bank rent ... ..	.....
Inland labor transport fund	62,141
Total ...	<hr/> 26,74,165

CHARGES.

	Rs.
District road fund	18,98,148
Rates on wards' attached and other estates	40,249
Charges of attached estates	2,978
Government estates improvement fund	39,495
Zemindary dāk fund Act VIII (B.C.) of 1865	2,27,572
Encamping ground grazing fund	153
Serai fund	477
Juggernath road fund	469
Copying fee fund	9,957
Pooree pilgrims' fund under Act IV (B.C.) of 1871... ..	8,901
Circuit-house fund	11,107
Town improvement fund	14,548
Bazar fund	903
Cantonment fund	31,242
Marine funds	54,046
Customs confiscation fund	5,676
Salt reward fund	24,874
Strand Bank rent	4,738
Inland labour transport fund	52,382
Total ..	19,22,915

BALANCES AT END OF THE YEAR 1872-73.

	Rs.
District road funds	6,19,803
Rates on wards' attached and other estates	27,016
Charges of attached estates	10,495
Government estates' improvement fund	2,71,455
Zemindary dāk	79,077
Encamping ground grazing fund	657
Serai fund (deficit)	544
Juggernath road fund (deficit)	689
Copying fee fund... ..	4,087
Pooree pilgrim fund	1,508
Circuit-house fund	144
Town improvement fund	17,755
Bazar fund	23,842
Cantonment fund	10,301
Marine fund	82,647
Customs confiscation fund	58,011
Inland labor transport fund	46
Salt reward fund	29,390
Court of wards	6,473
Town tax fund	9,346
Dacca committee fund (increase)	140
Darjeeling location fund	2,805
Strand bank road fund	21,681
Total	12,77,862

It will be seen that the principal head is District Road Funds.

District Road Funds.

The statement of toll receipts given in last report, Part I, page 172, included the net proceeds of tolls levied on canals and trunk roads (amounting to about four lakhs of rupees per annum,) which under the present system of account are credited in the Provincial Reserve as receipts of the Public Works Department, by which these works are maintained. There

remain then under the head of Local Funds the tolls on local roads and rivers and canals, which are credited to the Local Road Funds, and which amount to about six lakhs of rupees per annum (something less than a lakh of rupees being road tolls, and something over five lakhs ferry tolls). These tolls, with a small road cess levied in one district from the time of the permanent settlement, and in some recently settled estates, some small receipts in Balasore (the first fruits of the Road Cess Act), and some other petty receipts, make a total of about 6½ lakhs of rupees, which is the real income in 1872-73 of the various District Road Funds. Further particulars will be found below, under the head of Road Cesses. About 12 lakhs was in 1872-73 directly granted by Government in aid of the District Road Funds, making with some refunds transfer receipts, &c., a total of about 20 lakhs, which appear as receipts under this head. The road cess assessed for 1873-74 in 15 districts amounts to 8 lakhs of rupees, and if it were fully levied the real income from road cess, tolls, &c., would be about 14½ lakhs. The Government assignment in aid in the financial year 1873-74 is 10 lakhs, but great part of this will be spent in the first half of the financial year, whereas the road year and road cess receipts do not commence till the latter half of the financial year.

The rates on wards' and attached estates shown in the local fund statement are small percentages levied to defray certain costs of management.

Other local funds.

The Government estates' improvement fund is a percentage on the revenue of these estates allowed by Government to enable the local officers to make various minor improvements which fall on the landlord. The zemindary post fund is the small rate on the land of each district levied in commutation of the obligation of the zemindars to carry the district posts. The circuit-house fund consists of rents, &c., derived from circuit-houses and devoted to their maintenance. The town improvement fund, bazar fund, and cantonment fund, derived from town and cantonment lands, grazing, &c., though classed by the Accountant-General apart from municipal revenues, are really municipal receipts, and have been so treated in the statements submitted by the Government.

The marine funds are principally connected with the River Hooghly, and consist of fees devoted to the maintenance of establishments kept up for special purposes.

The customs confiscation and salt reward funds are held to pay rewards to which certain classes of customs officers are entitled.

The strand bank fund consists of certain rents and receipts for lands in Calcutta on the river-bank, and is devoted to local improvement. The inland labor transport fund consists of fees levied to meet charges connected with the cooly emigration to Assam and Cachar.

The following figures, taken from the "Reports on Taxation in British India, 1872," published by the Government of India, show the total local taxation, other than municipal taxation, in Bengal, with similar figures for the other principal Indian administrations. The municipal taxation will be separately shown

Comparison between local taxation in Bengal and in other provinces.

under Municipal Revenues. The pages in the Government volume where these figures are found are quoted.

BENGAL (*population, 65 millions*).—Fees, fines, and such receipts which are in no way taxation are omitted.

The estimated income of 1872-73 is given—

Local Taxation—

		Rs.	Rs.
Pp. 74-75.—One per cent. road cess	...	38,000	
Ditto Zemindary dāk (postal) cess	...	2,40,000	
Ditto Moturpha	...	175	
Ditto Tolls on ferries, roads, and canals	...	6,35,700	
			9,13,875

If 8 lakhs of rupees road cess assessed for 1873-74 be added, the total will be Rs. 17,13,875.

MADRAS (*population, 31 millions*).—The Madras returns give only the estimated figures for 1873-74. A large number of funds which are not, strictly speaking, the proceeds of taxation, have been excluded, such as the endowment fund (page 480), the Irrigation Cess Fund (page 481), and several others (pp. 481-485).

The income from taxation reckoned for the present purpose is—

Local Taxation.—

P.		Rs.	Rs.
478.—Land cess	...	34,28,500	
" —House-tax	...	96,500	
479.—Tolls	...	1,34,600	
" —Jungle conservancy fund	...	1,66,000	
480.—Village service fund	...	19,13,000	
481.—C. and S. canal fund	...	43,000	
" —Canal and ferry fund	...	18,300	
482.—Ferry rents	...	99,700	
			58,89,600

BOMBAY (*population, 13½ millions*).—The estimated figures for the

Pp. 598-603.

year 1873-74 have been given. The proceeds of the "staging bungalow fund," of "fees on sale of poisonous drugs," of "fisheries," "port and pilotage," "Indus conservancy," "school fees," "contributions in aid of local works," "jail funds," "ground rents," and such like sources, have been excluded as not being taxation.

The receipts from taxation, which are included for the present purpose, are—

Local Taxation.—

Page		Rs.	Rs.
596.—Local one anna cess on land	...	19,76,784	
" 597.—Toll fund	...	5,51,911	
" 598.—Ferry fund	...	1,13,998	
" " Panchmehal cesses	...	68,334	
" 599.—Sind jagreer cess	...	3,630	
" " Thur and Parkur cess	...	4,000	
" " Sand and quarry fund	...	15,216	
			27,83,866

NORTH-WESTERN PROVINCES (*population, 31½ millions*).—The taxation volume gives the estimated figures for the year 1873-74 only. From the local taxation figures have been excluded the commutation

money for chowkeedars' jageers in permanently-settled districts, amounting to Rs. 1,08,125. The items included are—

Local Taxation—

	Rs.	Rs.
Page 189.—The five per cent. cess on the annual value of temporarily-settled estates	36,76,220	
" 190.—The Banda district cess	90,804	
" " Road-cess in permanently-settled districts	47,040	
" 191.—Acreage cess in permanently-settled districts	3,16,333	
" 187.—Putwaree fund	17,47,062	
" " Ferry and bridge tolls	7,24,982	
" " Share of Punjab tolls	19,000	
" " Ganges river tolls	22,000	
		66,43,421

PUNJAB (population, 19½ millions).—Pages 15 and 29 of the appendices to the Punjab Government letter No. 1645, dated 26th December 1872, give the local receipts for the Punjab. The estimated figures for the year 1873-74 are given. The items which may fairly be reckoned as local taxation are:—

Local Taxation—

	Rs.	Rs.
Local rates cess on land	13,83,489	
School cess	2,19,994	
Road cess	2,26,940	
Chowkeedaree cess	6,56,754	
Lumbardaree cess	10,54,176	
Ala lumbardaree cess	59,435	
Putwaree cess	8,48,680	
Dawk or postal cess	45,633	
Tolls on ferries	5,53,625	
Tolls on roads	63,195	
Moturpha in Hazara	14,000	
		51,25,921

These figures may be thus summarized:—

PROVINCE.	Population.	Local taxation other than municipal for 1873-74.	Rate per head.
		Rs.	Rs. A. P.
Bengal	65,000,000	17,13,875	0 0 5
Madras	31,000,000	58,89,600	0 3 0
Bombay	13,250,000	27,33,868	0 3 2
North-Western Provinces	31,500,000	66,43,421	0 3 4
Punjab	19,500,000	51,25,921	0 4 2

It thus appears that the local taxation (municipal taxation apart) of Bengal, supposing the road cess for 1873-74 to be fully collected, will be only five pie per head, while that of other provinces varies from four annas to three annas per head. When the road cess is imposed throughout the province, the local taxation of Bengal may reach the amount of 8 pie (or say one penny) per head.

ROAD CESSES.

The Administration Report of this Government for the past year entered very fully into the history of the circumstances leading to the enactment of the Road Cess Act. It now remains only to report on the operations connected with the carrying the act into effect so far as it has been introduced into Bengal.

The Act provides, as was stated in last year's report, for the valuation of the land by means of returns of all holdings superior and inferior; it also imposes rates on houses, mines, and other immovable property. It establishes local bodies or committees, which are to ascertain the needs of districts and localities in regard to roads, canals, and other means of communication; to bring on their books all roads, &c., which it is thought desirable to maintain as local public communications; to determine the work to be undertaken in each year, and to strike a rate for the year on the whole immovable property of the district to meet the necessary expenditure. This rate may in no case exceed one-half an anna in the rupee of the net profits of the landholders and other owners, *i.e.*, about three per cent. The occupant ryots pay half the rate assessed. The valuation is to last for five years, and to be subject to revision at the end of that period.

The general progress of the measure has been fully and repeatedly reported for the information of the Government of India and Her Majesty's Secretary of State.

General progress of the measure. Districts to which the Act has been extended.

The Act was introduced in the sixteen districts marginally noted in August and September 1871. To these Purneah and Maunbhoom were

Burdwan ...	..	} Burdwan Division.	
Hooghly including	..		
Howrah ...	..	} Presidency "	
24-Pergunnahs	..		
Nudda ...	..	} Rajshahye "	
Jessore ...	..	
Moorshedabad	..	} Dacca	
Rajshahye ...	..	
Dacca	..	} Chittagong "	
Furreedpore	..		
Tipperah	..	} Bhaugulpore "	
Monghyr	..		
Bhaugulpore	..	} Orissa "	
Cuttack	..		
Pooree	..	} Chota Nagpore "	
Balsore	..		
Hazareebaugh	..		

afterwards added, and Mymensingh was added in September 1872. In June 1873 the Act was extended to Beerbhoom and Bancoorah. Thus the Act has been introduced into twenty-one districts in all. In sixteen of these districts the valuations are already complete. In Maurbhoom and Tipperah the valuations are nearly ready. In Beerbhoom, Bancoorah, and Mymensingh, the valuations are in progress.

The whole of the Central and Western country comprised in the Presidency, Burdwan, Bhaugulpore, and Orissa divisions, and the Hindustanee and Bengalee portions of Chota Nagpore, are thus subject to the Act, except only the great district of Midnapore, and that will probably be the next district to which the Act will be extended; but the Lieutenant-Governor does not wish to sanction this extension just at present.

In the Patna division large funds are raised by ferry tolls, and though they to some degree partake of the nature of transit duties,

the Lieutenant-Governor does not desire to substitute the road cess immediately if the people continue to prefer the present system. The intention, also, has been not to carry the Act further in the Northern and Eastern districts of Bengal Proper till we gain more experience; but now that the Northern Bengal Railway has been sanctioned and marked out, the Lieutenant-Governor thinks that the road cess will be required in the districts through which it passes, viz. Rungpore, Dinagepore, Bograh, and Pubna. These districts have been much neglected under the old system of assignment, and are badly off for roads. Now that the line of railway is settled, railway feeders and other cross roads to open up the country will be specially wanted.

In the ryotwar districts of Assam, apart from other considerations, the application of the road cess depends much on the way in which the ryotwar rents are to be treated as regards the levy of cesses; and in Sylhet and Chittagong the estates are so small as to be almost of the nature of ryotwar holdings. The question of introducing the Act into the extreme Eastern districts has been deferred.

District Committees, representing, as far as possible, all classes of tax-payers, have been established in all cess districts, and the Lieutenant-Governor has also directed the establishment of similar committees in all other districts for the administration and utilization of the sources of income or grants-in-aid made over to those districts for the purpose of district trade. It has not been deemed possible, in the first instance, to attempt the election of district committees over so great an area as a Bengal district, and as the functions of the more local branch committees cannot commence till a rate has been struck, money raised, and a portion of it assigned to local subdivisions, they have not as yet been generally established in very many places. In the district committees there are usually three or four official members, but they are always a comparatively small minority, and the great body of the committees are independent rate-payers. Every effort has been made so to select them that they shall represent all classes. The Lieutenant-Governor has been very anxious that the ryots, as well as other classes, should be represented on the committees. There has been a good deal of prejudice and a great deal of practical difficulty in the way of effecting this object, but in some districts the ryots are now really fairly represented in the road cess and other committees.

The Lieutenant-Governor has considered it better to delay the smaller and simpler operations necessary for the house assessment till the land valuations were approaching completion. The house assessment has been made in a very moderate and liberal spirit. It has not been thought desirable to harass mere agricultural villages (where one or two houses or shops might perhaps be found liable), since the expense and annoyance of valuation would not be worth the money obtained. The house assessment has, for this time at least, been confined to places more considerable and containing more assessable houses than these mere

Establishment and constitution of Road Cess Committees.

House assessment.

agricultural villages, and which are, at the same time, not municipalities under any of the Municipal Acts, the municipalities being under law wholly exempted from the road cess. It is not therefore expected that the house-tax will yield very much at present.

The cess has been declared leviable from the 1st October 1873 in 15 districts: Hooghly, 24-Pergunnahs, Nuddea, Jessore, Moorshedabad, Rajshahye, Dacca, Furreedpore, Purneah, Monghyr, Bhaugulpore, Cuttack, Pooree, Balasore, and Hazareebaugh. Although the valuations are complete in Burdwan, the Lieutenant-Governor has thought it best to keep back the levy of the cess in that district for one year more on account of the fever. The balances which still remain available of the old road funds have enabled His Honor to carry on this district temporarily without the cess.

Cess declared leviable in 15 districts from 1st October 1873.

Suspension of the cess in Burdwan on account of the fever.

In some few districts only, which had hitherto had large assignments from the amalgamated fund, and which have many roads to keep up, the committees have found it necessary to impose the maximum rate of road cess under the Act, but in most districts a smaller rate has been imposed. The Government has thought it better, wherever possible, to commence with a moderate rate, and has advised district committees to adopt a moderate rate in the first instance. In the district of Balasore, where the rate was first imposed, in 1872-73, it was fixed at half the maximum rate, i.e., $\frac{1}{2}$ anna per rupee, which will fall on the ryots at the rate of $\frac{1}{8}$ of an anna, or half a pice per rupee of their rent. If we take the average rent of ryots to be Rs. 10, each ryot at this rate will pay on an average $1\frac{1}{2}$ anna, or five pice, as road cess along with his rent, and the maximum rate imposeable would be $2\frac{1}{2}$ annas. The Lieutenant-Governor calculates that at the maximum rate the road cess will be equal to a tax of about 4 annas per maund on the salt consumed by the ryot and his family, and at a half rate equal to a tax of 2 annas per maund. Taking the salt consumed by the family to be 24 seers per annum, (say $9\frac{1}{2}$ lb per head), and the duty on that quantity of salt to be Rs. 2, the maximum road cess would be equal to about one-thirteenth of the salt-tax. A remission of 8 annas per maund in the salt duty would give the Balasore ryot, for instance, fully four times as much relief as the road cess imposes a burden on him.

Rates at which the cess has been imposed.

Incidence of the rate.

The rate adopted in the several districts in which the road cess has been declared leviable is as follows:—

Hooghly	...	Half rate.	Furreedpore	...	Three-fourths rate
24-Pergunnahs	...	Full "	Purneah	...	Half "
Nuddea	...	Full "	Monghyr	...	Half "
Jessore	...	Full "	Bhaugulpore	...	Three-fourths "
Moorshedabad	...	Half "	Cuttack	...	Half "
Rajshahye	...	Half "	Pooree	...	Half "
Dacca	...	Full "	Balasore	...	Half "
			Hazareebaugh	...	Three-fourths "

In issuing the following proclamation, when the rate was fixed in each district, full means were taken to make the amount of the cess payable by the ryots generally known and understood. The proclamation, of which thousands and thousands of copies were circulated far and wide in all the road-cess-paying districts, and advertised with every publicity, is appended :

Government proclamation fixing the rate in each district.

PROCLAMATION.

"The road cess leviable under Bengal Act X of 1871 has been imposed by the Road Cess Committee of the district of for the road cess year 1873-74, at the rate of per rupee on the assessed value of all lands, and also on mines, &c. ; and at the rates following on the houses of persons who do not pay road cess and on shops.

"But municipalities in which the District Municipal Improvement Act and District Towns Act are in force are exempt from all road cess. The road cess is leviable from the zemindars, under-holders, and ryots, with each instalment of revenue or rent due, from and after 1st October next.

"The rates at which the tax has been imposed have been notified by the Collector in the district, and published in the *Gazette* as required by Section 75 of the Act. Notice of the amount payable will also be given to the owner of each estate, and the Board of Revenue will circulate particulars of the modes, rates, and conditions under which the tax is to be levied by and from the various classes of tenure-holders and cultivators.

"This proclamation is chiefly to inform the ryots of their liabilities and rights.

"From and after 1st October next every ryot in the district of is bound to pay to the person to whom his rent is payable, and along with his rent, half the rate of road cess imposed by the committee ; that is, the ryot is to pay for every rupee of rent. This tax then is of the nature of a cess at per rupee of rent payable by each ryot. By the provisions of the regulations no other cess is legal or recoverable by law ; this one cess only has been imposed by law, and the zemindars and other holders are authorized to levy it at the rate named above.

"As regards the house-tax, all house and shop-holders are warned that they are not liable to pay the tax in any case unless the house or shop has been included, with the value thereof, in a roll of houses, assessed to the road cess posted in the village as the Act, Section 43, requires. All agricultural ryots and all landholders who carry on no other trade or profession are exempt from this house-tax. All houses of less than Rs. 100 value, and all shops of less than Rs. 25 value, are also exempt from this tax.

"All persons assessed to the road cess are informed and assured by the Government that every pice levied under the Act will be spent, in the district in which it is raised, to improve the local roads, canals, and rivers in the district for the benefit of the inhabitants ; nothing will be diverted to any other purpose than that which the law directs.

"Sub-divisions of the district will be arranged, and a fair proportion of the proceeds of the tax will be apportioned for the petty roads of that sub-division. That money will be distributed and spent by local men trusted by the inhabitants, who will be selected or elected for the purpose. Every tax-payer is encouraged and invited to claim that the tax shall be fairly applied to the village roads and local paths or water channels in which he is interested. The Government will use every effort to see that such local claims are fairly met, and that every taxpayer derives a fair benefit from the tax which he pays."

No efforts have been spared to acquaint the people with the real nature of the cess, and to protect the ryots from extortion. The fear entertained of the cess is very much due to

Efforts made to publish the real nature of the cess and to prevent extortion.

ignorance of its real amount and incidence. Till the people have some knowledge and independence, we cannot, it is to be feared, protect them altogether. A little knowledge and independence will save them many times more in respect of illegal cesses and exactions than this Act imposes. But all that can be done by Government in this respect is being done. The Lieutenant-Governor is glad to be able to say that in Balasore, the only district in which the road cess has as yet actually been levied to a large extent, the collection of the cess has been carried out very successfully,

Success in Balasore.

without oppression of the ryots, who there, it is stated, "do not pay a pice more than they ought." The Collector writes: "All difficulties in Balasore are now over, and the cess will work for the next fifty years if need be. The people spoke very bitterly against it at first, but now they see how lightly it falls. I hear no murmurs." The Collector entertained no doubt that the whole of the cess would be realized in due course. "The money," he wrote, "is coming in very much faster than it did at first." He has since stated that the road cess collections of 1872-73 had been most successfully carried on to the end. Those of 1873-74 had also in November been very well commenced, without grumbling or difficulty, in all the Orissa districts.

In the other districts where the cess has been imposed in the present year, no rumours of dissatisfaction or resistance have been heard, and in several districts the rate has already begun to come into the Treasury, though the first instalment is in most of these districts not due from the zemindars till 12th January next.

In the concluding paragraph of the Government proclamation it was distinctly stated that a part of the road cess income would be spent on improving village roads and waterways, and villagers were expressly encouraged to

Measures taken to ensure the cess being applied to village roads and local paths and local water channels.

apply for such expenditure about their homes. The Lieutenant-Governor is glad to say that most of the district committees have, in accordance with the intentions of the Act, and with the pledges of Government, set aside in their budget for the coming year liberal grants for village roads. In some of the non-cess districts sufficient provision for village requirements has not been made; the Lieutenant-Governor trusts that the omission may be remedied in future years, and that savings on other grants of the current cess year (1st October 1873 to 1st

October 1874) may be utilized to make grants for petty local roads. In some districts the proper expenditure of these village road grants may be a difficulty, but His Honor does not doubt that in the end it will be successfully solved. In most of the road cess districts branch committees are now being formed at the several sub-divisions, and the duty of supervising the expenditure of these grants will be committed to the branch committees. But even a sub-division is a large area, and there will be practical difficulties in the way of doing justice to outlying villages and localities. The operations of the branch committees will have to be decentralized as much as possible, and the small improvements in village communications will have to be largely entrusted to the persons who are personally interested in the improvements.

The Lieutenant-Governor attaches the greatest importance to the successful attainment of these objects, and he has asked the local officers to give their best consideration so to arrange that the villagers may actually realize that their village inter-communications are to benefit by the road cess. It has been pointed out that the same plan of spending the grants can hardly be applicable to all districts; and that what may answer very well in sub-divisions like Ranaghāt or Moonsheegunge, might not be so suitable among the Sonthals of Govindpore or of Pachumba. But the Lieutenant-Governor is satisfied that if district and sub-divisional officers will work out their own plans for making the expenditure on village roads a tangible reality, they will in the end succeed, as they have undoubtedly succeeded in carrying out His Honor's village school policy. No doubt there will be some failures to begin with, some money will be misspent, and perhaps there may be some cases of speculation, but after all such cases do occasionally occur in Government departments, and the district and branch committees cannot hope to be wholly exempt from such risks. We must only do what we can to reduce these to a minimum.

Much as the Lieutenant-Governor doubted at the time the advisability of imposing a share of the cess on the ryots, he has latterly been clearly of opinion that since we have gone so far with the Act as settled, we ought not to go back, but should carry it through. Illegal cesses by zemindars are, as is shown in the chapter of this report on Changes of Administration, quite universally levied in large numbers, and to a large aggregate amount. The small road cess will be no great novelty or complication of accounts, but will be levied in the same way, and under the same system of accounts, as have hitherto been universal under native rule and under British rule in these provinces. It is hoped that in other districts, as has certainly been the case in Balasore, the information given to the ryots, and the protection against extortion afforded to them, will enable them to save, in respect of unjustifiable cesses, more than they have to pay for this one legitimate road cess. The result, moreover, of the Lieutenant-Governor's inquiries in connection with the agrarian disturbances in the district of Pubna, to which the Cess Act has not been extended, and regarding the feeling of the people in the neighbouring cess districts, is to induce His Honor to hope that the ryots will think themselves compensated for their share of a light cess by the security afforded them by a public record of rents and

tenures. At any rate, as the ryots have always paid so much in the rupee in addition to their rent, the road cess arrangements will alter the amount of this existing rate, but not the manner of the levy or the mode of account. The Lieutenant-Governor believes that it will be a good thing in the end that all classes of the community should contribute in their degree for benefits common to all. No doubt, the zemindar being allowed a deduction of one-half the rate on the amount he pays as land revenue, something more than one-half the gross road cess will be leviable from the ryots. Under the present valuations, the ryot's share of the cess will be from about four-sevenths to about three-fifths of the whole. But against the excess share paid by the ryots must be set the fact that the labour and risk of collection is thrown on the zemindars, and the consideration that in the end what is taken from the tenants, whose rents the zemindar can raise, will affect the power of enhancement and fall indirectly on the zemindar. On the whole, the Lieutenant-Governor considers that there will be a greater acquiescence in the levy of rates as the thing is now arranged than there would be if any change were made, while in the end the assessment will fall mainly on property, as it rightly should.

As no final report has yet been received from the Board of Revenue upon the road cess operations, complete figures cannot now be furnished showing in detail all information that has been acquired about land

Registers of tenures.

tenures in Bengal, and the work that has been done. Establishments are at work to arrange, tabulate, and prepare the information afforded by the returns, and it is expected that much most interesting statistical information will be afforded. Meantime, we have only some very general facts and figures. An abstract of the number of estates and under-tenures of all sorts that have been registered up to the end of September is appended:—

DISTRICTS.	Number of tenures		DISTRICTS.	Number of tenures.	
	Over Rs. 100.	Under Rs. 100.		Over Rs. 100.	Under Rs. 100.
Burdwan	4,804	170,264	Mymensingh	508	6,504
Hooghly with Howrah ...	1,667	34,440	Tipperah	3,541	22,955
24-Pergunnahs	3,429	25,235	Monghyr	1,989	11,525
Nuddea	2,410	17,172	Bhaugulpore	1,690	7,215
Jessore	4,273	72,845	Purneah	2,236	18,060
Moorshedabad	1,638	36,215	Cuttack	1,475	27,369
Rajshahye	2,078	32,187	Pooree	729	13,928
Dacca	231	19,209	Balasore	232	7,215
Furzedpore	1,080	28,690	Hazareebaugh	850	7,044
			Maunbhoom	2,337	9,251
			Total	37,170	507,336

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The registration is completed in these districts, except in Mymensingh, Tipperah, and Maunbhoom. In some districts it is found that subinfeudation has been carried to a great extent, to the sixth degree, and even beyond. Burdwan and Jessore show the largest number of tenures, and Balasore the smallest number.

An abstract statement is also annexed showing particulars respecting the valuation of estates, the revenue payable, and the amount of road cess assessed in the 15 districts where the rates have been struck for the current year. These figures cannot yet be given as absolutely exact, some minor adjustments still remaining, but they are substantially correct:—

1	2	3	4	5	6	7
Name of district and the rate of cess fixed in it.	Rateable valuation of the land.	Land revenue.	Amount of road cess on land for 1873-74.	Amount on mines for 1873-74.	Amount on houses for 1873-74.	Total amount of road cess for 1872-73.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Hooghly with Howrah (Half-rate)	43,90,566	18,78,667	53,925	...	8,652	62,577
24-Pergunnahs (Full rate.)	43,13,712	14,81,500	1,11,654	...	11,532	1,23,186
Nuddea (Full rate.)	28,03,598	10,14,325	71,703	...	12,883	84,143
Jessore (Full rate.)	38,29,644	10,45,137	1,03,298	...	6,556	1,09,854
Moorshedabad .. (Half rate.)	32,20,073	13,06,458	40,116	...	2,968	42,984
Rajshahye (Half rate.)	33,85,249	10,30,072	35,010	...	2,382	67,592
Dacca (Full rate.)	22,05,530	4,73,016	61,000	...	6,000	67,000
Furreedpore ... (Three-fourths.)	11,96,011	3,38,677	24,134	...	1,230	25,364
Monghyr (Half rate.)	38,89,018	8,62,347	54,028	...	3,882	57,910
Bhaugulpore ... (Half rate.)	38,28,582	5,39,774	55,567	...	1,940	57,507
Purneah (Three-fourths.)	28,39,522	11,61,523	52,939	...	2,490	55,435
Cuttack (Half rate.)	20,81,454	7,91,326	26,340	...	697	27,037
Pooree (Half rate.)	10,66,110	4,78,388	12,921	...	33	12,954
Balasore (Half rate.)	8,62,956	4,12,424	13,153	...	198	13,351
Hazareebaugh (Three-fourths.)	9,80,631	60,568	22,274	5	1,079	23,958
Total ...	4,08,96,156	1,28,74,192	7,36,122	5	62,528	8,00,655
Burdwan (No rate has been fixed.)	54,23,492	24,94,903	.....	...	.....	.....

The most important items of the information before Government are as follows :—

	Rs.
Total rateable valuation of the land lying in the 15 districts after deducting charges, &c., under the Act	4,08,96,156
Total land revenue of the 15 districts	1,28,74,192
Amount of road cess on lands for 1873-74	7,38,122
Amount on mines	5
Amount on houses	62,528
Total amount of road cess of the 15 districts for 1873-74	8,00,655

The valuations of these districts are shown to exceed on an average three times the total revenue assessed on them. The district of Hazareebaugh is quite abnormal, the revenue being very low and the valuation upwards of 15 times the revenue. In the district of Bhaugulpore the total valuation is more than seven times the land revenue. In the district of Dacca it is almost five times. In Monghyr it is more than four times. In the ordinary Bengal districts, such as Jessore, 24-Pergunnahs, Rajshahye, and Furreedpore, it is about three times. It is somewhat less than three times in Nuddea, Hooghly, Moorshedabad, and Purneah. In Orissa the proportion is least. In Balasore it is less than twice as much; and in Pooree and Cuttack, though more than twice, the valuation is considerably less than three times the revenue. But these three last mentioned districts are temporarily-settled districts, and consequently not on the same footing as those which are permanently settled.

The total valuation of the land is largest in Burdwan with upwards of 54 lakhs; and in the districts of Hooghly with Howrah and of the 24-Pergunnahs, in each of which it exceeds forty lakhs of rupees. In Monghyr, Jessore, Bhaugulpore, Rajshahye, and Moorshedabad, it exceeds thirty lakhs; in Purneah, Nuddea, Dacca, and Cuttack, it exceeds twenty lakhs; in Furreedpore it is nearly twelve lakhs; in Pooree it exceeds ten lakhs; in Hazareebaugh it is nearly ten lakhs; and in Balasore, where it is least, the valuation is a little over eight and a half lakhs.

The Lieutenant-Governor is not prepared to accept these valuations as a full valuation down to the very ground, as he has expressed it. He has no doubt that in the case of many small properties, and of very many small sub-tenures, the summary valuation permitted by the Act has resulted in some under-valuation of the lower strata of holdings. It is also to be remembered that all ryots' tenures under Rs. 100 rental are valued at the rent they pay, even though these rents may be, and very often are, low profit rents in the case of the many ryots who hold as fixed rents or on an occupancy tenure. But on the other hand, His Honor quite believes that we have got a valuation approximate to a degree sufficient for practical purposes, and which will yield a revenue sufficient for the expenditure which can profitably be undertaken with our present means and machinery. Having accomplished so much this time, a closer valuation may be

made five years hence, at a time when, it is hoped, both the interest of the people in local works for their own benefit, and the executive machinery, will have so far developed as to enable the committees and sub-committees to spread the benefits over a wider surface, and to carry petty roads and water-cuts to the village doors of the rural population in a manner devised and approved by themselves.

The Lieutenant-Governor has not ceased to make constant and minute personal inquiries about the working of the Road Cess Act. He has received from all the local officers the same reply, that they have met with no great or insuperable difficulty in the valuations, and that the working of the Act has so far been a complete success. It may be said that the valuations have been completed with an ease and absence of friction which has astonished the most sanguine.

The only serious difficulty raised has been quite a subsidiary one, regarding the irregular rent-free tenures within estates. It was represented that many of the holders of these tenures were men who would think it a great grievance to be obliged to pay through the zemindar; and provision having been made by Section 26 of the Act for such cases, Mr. Schalch permitted such holders to make separate returns in three or four districts. They have, in the 24-Pergunnahs and one or two other districts, taken advantage of this permission to an unexpected degree, and have almost swamped the officer in charge of the cess operations with a multitude of returns of very petty tenures, real or pretended, so much so as to make it a question whether this permission should ever have been given. Clerical labour apart, however, almost the only practical difficulty would be the necessity for serving an enormous number of notices every year under Section 22 of the Act. The question is, as has been stated, a mere subsidiary question, not affecting at all the main working of the Act. The fact is that the whole law regarding these unregistered rent-free holdings is in a most unsettled state, and that it is better to avoid raising such a large question in connection with the road cess more than can be helped.

Upon the whole Sir George Campbell does not hesitate to affirm that the experiment of valuing the lands of Bengal and imposing a road cess has now been carried so far as to enable us to say with confidence that it is a distinct and decided success; that the difficulties have been by no means so insuperable as had been feared; and that we are well advanced towards obtaining a fair record and valuation of landed property and tenures in Bengal, a sound basis for the local taxation of immovable property, and a good income for the construction and maintenance of roads and water channels. The road cess has been actually imposed, and collections have commenced without difficulty or hindrance. The Lieutenant-Governor has expressed to the Government of India that for this successful result he considers that the Government is mainly indebted to the care, skill, and experience of Mr. Schalch, the Senior Member of the Board of Revenue, whose unrivalled knowledge of the land system and land tenures of Bengal, and constant devotion to the public service, have enabled him, both in the settlement of the Bill and in its working, to attain a success such

as without him we should certainly not have obtained. His Honor has ventured to claim for Mr. Schalch at the hands of the Government of India, and of Her Majesty's Secretary of State, an acknowledgment of his very special services in the successful solution of this great and difficult problem, which has been the occasion of so many discussions and so much anxiety. The Lieutenant-Governor desires also to add his testimony to the zeal, energy, and tact with which the local officers have performed their duties under the Act. However adverse the opinion of some officers may have originally been to some of the measures of the present administration, and however some of them may have grumbled regarding some questions of promotion in respect of which the Lieutenant-Governor thought it his duty to depart from worn grooves, His Honor desires to testify that they have, with scarcely any exception, been most loyal and thorough in carrying out the measures decided on, whether it be in regard to the Census, in regard to the Road Cess Act, or in regard to anything else. So far from opposing the Government, they have given it the most hearty assistance, and have attained a success beyond expectation, such as would never have been achieved by any half-hearted work. Sir George Campbell has felt this and acknowledges it thoroughly.

The Lieutenant-Governor cannot, moreover, regard but as extremely satisfactory the ready way in which the landholders have fulfilled their obligations under the Act. It may be instanced that in one district alone (in Furreedpore), out of 1,692 calls for returns 1,691 were at once obeyed. The Collectors of Hooghly and Burdwan were able to collect the returns without the imposition of a single fine. In other districts where it was necessary to impose penal measures, the penalty has been very rarely enforced, and in all cases where it has been found that the fines were excessive, or the default not wilful, the fines have been refunded wholly or in part. It has been generally found that where the requirements of the Act were fully explained and the landlords had the records of their rent transactions in good order, the returns were submitted within a fair period, and in no case has any determined resistance been shown even when the information required had to be collected from the papers of past years.

With reference to the anticipated scarcity, His Excellency the Governor-General has recently desired that "the levy of the road cess may be postponed in any district or portion of a district where the Lieutenant-Governor may consider that the cess-payers are in distress." "It is to be remembered," it was added, "that in those districts which are not so severely affected, the proceeds of the road cess will afford the means of usefully employing any surplus labour that may be thrown upon the market." The Lieutenant-Governor has accordingly authorized the Commissioners of the cess districts which for relief purposes have been classed as distressed, to suspend the collections of the cess if it is found that the conditions are certainly such as have been described; and he authorized the Commissioners of Rajshahye and Burdwan to suspend the cess in any portion of the road cess districts of their divisions, or in any particular estate, in which it may be found that

Suspension of the road cess authorized in certain districts and parts of districts.

the cess-paying ryots are reduced to present distress, and that rents are not realized. In issuing orders, His Honor pointed out that although high prices may be expected to prevail everywhere, the agriculturalists who may have even a moderate or short crop which has not wholly failed, will have a compensation in these high prices; and that till the famine is extreme, they suffer far less than the landless classes. It was therefore very necessary to discriminate between these cases, in which an extreme failure has involved all classes in a common distress, and a moderate or partial failure, in which the labourers and non-agriculturalists chiefly suffer, and in which rents are paid without very heavy remissions. The Lieutenant-Governor has left it to the discretion of these Commissioners so to act for the best as neither to remit the cess unnecessarily, nor to press the people too much where they are really reduced to great distress; and wherever the cess is postponed, it has been directed that the fact should be at once made known to the cess-paying ryots. Fortunately the districts most threatened with scarcity, those of the Patna division and the Northern Rajshahye districts—Rungpore, Dinagopore, and Bogra—are not cess districts, and the cess districts of the Bhaugulpore division only are among those already classed as distressed.

Besides the district road cess which is imposed under the Road

Other road cesses and tolls.

Cess Act, some funds are supplied for the maintenance of roads from tolls, and minor cesses, which are now exclusively the property of the district in which they are levied, and to which allusion has already been made under the head of Local Funds. In the district of Shahabad it has been the practice, under an engagement made at the time of the permanent settlement, to levy a cess of one per cent. on landholders for roads; and under orders of the Government of India in 1862, this cess has been extended to all estates not previously permanently settled which come under settlement; on such estates a rate of one per cent. is imposed in addition to the land revenue assessment. In these provinces, however, the area so assessed is comparatively small, and the proceeds of the rate during 1872-73 amounted to only Rs. 27,660, of which more than Rs. 16,000 came from the district of Shahabad.

The receipts from road tolls amounted in 1872-73 to Rs. 85,690, which were realized in the districts of the Central and Western Bengal, the division of Patna, and the Monghyr district. These tolls are very unpopular and unequal in their incidence, as well as partaking of the nature of a transit duty, and the Lieutenant-Governor trusts that they will gradually be done away with in all districts as the road cess is brought into play.

Ferry tolls stand on a somewhat different footing. The road tolls are devoted to the maintenance of roads: the ferry tolls are devoted, in the first instance, to the maintenance of ferries, and the surplus goes to the maintenance of roads and to providing accommodation for travellers. The ferry realizations of the past year amounted to Rs. 5,01,516, of which more than half is collected in the Patna division, and nearly one-fourth in Tirhoot, where the Lieutenant-Governor fears that ferry tolls may be carried to excess. The proceeds of all these and other funds were formerly credited to an amalgamated road fund, being

transferred to that head at the end of each year; the Government distributed the available funds by annual allotments according to the requirements of each district. From the commencement of the financial year 1872-73 these funds have been made strictly local to the districts where they are raised, and are managed by the local committees.

As already stated, Government has always hitherto given, and still gives, grants-in-aid to district road funds. These grants-in-aid generally amount to about ten lakhs per annum, but in the past year about twelve lakhs were given to last till 30th September 1873; and even after the Road Cess Act is in full working order it is contemplated to continue these grants in a modified degree to the poorer districts.

The total road fund income of all the districts for the financial year ending 31st March 1873 (which is different from the road year ending 30th September, accounts for which are not yet final,) was as follows:—

Receipts under the Road Cess Act—				Rs.
	Cess ...	...	...	4,886
	Fines ...	...	...	19,130
Old one per. cent road-cess	...	...	...	27,660
Road tolls	...	...	...	85,690
Ferry tolls	...	...	...	5,01,516
Canal tolls	...	...	...	4,203
Sales of produce	...	...	...	2,815
Refunds, &c.	...	...	...	2,602
Miscellaneous (principally a transfer in account)	...	...	...	69,973
Grant-in-aid (to last till 30th September 1873)	...	...	...	12,09,060

EDUCATION CESSES.

At page 247 of last year's report it was stated that "in Bengal alone, of all the provinces of India, education had never been aided in any way by any grants from local or municipal funds." That reproach is not now literally correct. In another part of the present report it has been explained that the short Municipal Act passed in 1873 has empowered municipal bodies to spend a portion of their income in educating the children of their towns if they voluntarily choose to do so. The Act giving these powers became law after the end of the fiscal year, and therefore there cannot be any considerable expenditure of municipal money on schools until the year 1874. Some Municipalities have intimated their intention to make grants to their schools.

The Government of India has recently granted for purposes of local improvement three per cent. of the rental of Government estates and of ryotwaree estates in Bengal, and six per cent. of the rental of the ryotwaree districts of Assam and the Bhootan Dooars. It was left to the Government of Bengal to decide what proportion of this allotment should be given for educational

Educational assignment out of the revenue of Government estates.

and other local purposes, and the Lieutenant-Governor decided that out of the local improvement allotment—

- (a) In Assam and the Dooars, two per cent. on the net rental should be devoted to primary schools.
- (b) In Government estates situate on a district where the Road Cess Act is not in force, one per cent. of the net rental should be spent on primary schools.
- (c) In districts where the Road Cess Act was in force, two-thirds of the balance of the local improvement grant, after defrayal of the landlord's share of the road cess, should be devoted to primary schools.

These orders only take effect from the 1st March next (1874), so that no actual result on the number of primary schools can yet be reported.

The Government of India also agreed that at the resettlement of all temporarily-settled estates in Bengal, three per cent. of the total assumed rental should be set aside as the local improvement cess, and the Lieutenant-Governor directed that the share assignable out of this cess for primary schools should be settled in the same way as for Government estates.

The Court of Wards has set aside in most solvent estates under its care a certain annual sum for the establishment of primary schools and for the encouragement of other schools. On the Noakhally estates belonging to the Paikpara Wards, this policy has been most successfully carried out, and a considerable number of primary schools has been established. To each of these schools is attached a Moulvie (Mahomedan teacher) for the benefit of the Mahomedan ryots, who constitute the great majority of the rural population of Noakhally. In the Durbangah and other estates a similar policy has been followed.

The area to which the orders summarised in the foregoing paragraphs apply, is but a very small proportion of the whole of Bengal, and it must be admitted that in by far the greater part of the country we are still without any provisions for primary education. On the Wards' estates there is no guarantee that when the estates pass from the supervision of the Court of Wards any considerable annual sum will continue to be spent on primary education, though the Lieutenant-Governor has strong hopes that the owners of great landed incomes like the Rajah of Cooch Behar, the Maharajah of Durbangah, the Rajah of Hutwa, the Maharajah of Chota Nagpore, and the Zemindars of Paikpara, will continue the policy begun by the Court of Wards, and will do their duty to the poorer people on their estates by subscribing for the support of primary schools. Even, however, if the owners of great estates set a good example in this important respect, there will still remain the vast majority of the estates of the permanently settled districts which will contribute nothing towards the education of their inhabitants. The temporarily-

settled areas in Bengal outside the provinces of Assam and Orissa are barely 5 per cent. of the revenue-paying lands of the country, so that after all that has been done there will remain estates with a rental of over fifteen millions sterling which contribute no share at all to the support of primary schools. Seeing that in all other provinces of India village schools are supported mainly, if not wholly, by a contribution from the rental of land, the great provinces of Bengal must remain very destitute of village schools until some method of raising funds for primary education shall have been devised. A statement of the needs of Bengal in this respect was laid before the Government of India in the summer of 1873, and the Lieutenant-Governor prayed for a decision whether the new primary school scheme should be continued for a time by means of the existing provincial balances, in the hope that other ways and means might hereafter be forthcoming, or whether the Government of India would be pleased to make some special grant for their support and extension, or whether the scheme, which had so far succeeded exceedingly well, was to be foregone, and we were to give up all hope of establishing primary schools in Bengal. On that representation no orders have been yet received.

The present difficulty in regard to the providing the means of primary education in Bengal may be thus stated:—

“For some years the Government of India had pressed upon the Bengal Government the very great necessity of promoting primary education among the masses of Bengal; two successive Viceroys in Council also urged on the Bengal Government that funds for the extension of primary schools in Bengal villages ought to be found by a local rating, as has already been done in other provinces of India.

“The Bengal Government of 1868-70 did not concur in the views of the Supreme Government in regard to local rating, but the Government of India adhered to its view, and submitted the papers regarding this very important question to Her Majesty’s Government. The Secretary of State for India reviewed* the whole question and the discussions thereon, and His Grace announced the views of Her Majesty’s Government to be that a local rating

* Her Majesty’s Secretary of State’s despatch of the 12th May 1870.

would not be unjust or inexpedient in the permanently-settled districts, provided the rate fell on all property accessible thereto. In regard to an educational rate, it was announced that ‘Her Majesty’s Government can have no doubt that as elsewhere, so in Bengal, the expenditure required for the education of the people ought to be mainly defrayed out of local resources.’ The despatch goes on to say that ‘this (expenditure on education), however, is precisely the application of rates which the present condition of the people may render them least able to appreciate. I approve therefore of your Excellency proceeding with great caution in the matter.’

“On the present Lieutenant-Governor fell the duty of giving effect to the views of the Government of India and of Her Majesty’s Government, as referred to in the foregoing paragraphs. He understood the despatch of May 1870 to sanction the principle of local rating for education, on which principle the Government of India had so strongly insisted, but to enjoin great caution in its application. In accordance

with that view the Lieutenant-Governor thought it desirable not immediately to attempt for the present any compulsory rating for education in the country districts where the road cess has, under Bengal Act X of 1871, been imposed for the maintenance of roads and water-ways. He, however, proposed to try the principle of a rate for education on the smallest possible scale by providing that in first and second-class municipalities, that is, in the towns to which the Road Cess Act does not extend, if the means of primary instruction do not exist, it should be obligatory to provide for the maintenance of primary schools.

"It was at the same time proposed to make lawful a voluntary provision for primary schools in village communes.

"Among the reasons given by His Excellency the present Viceroy for refusing his assent to the Bengal Municipalities' Bill, His Excellency has said that he could not assent to those portions of the Bill which proposed to make the provision of elementary education obligatory upon first and second-class municipalities.

"The provisions in regard to rural communes were also disapproved.

"The present situation then is, that this Government has intimated its intention not to attempt for the present to impose a compulsory rate for schools in the country districts, and His Excellency the Viceroy has refused his assent to provisions for imposing such an obligation on towns and for enabling rural communes voluntarily to raise funds for the purpose. Thus the Bengal Government can have no rating for education at all. It follows that these provinces are in exactly the same position as when the discussion first commenced, having no funds for primary education, unless they can be given from the general revenues. The Lieutenant-Governor has, out of exceptional savings, made a small provision for primary schools during the present year. But no such savings can be expected in coming years, and there has been no successful step made to meet permanently the difficulty that Bengal has no funds for establishing, aiding, and maintaining primary schools for the sixty-five millions of its subjects."

MUNICIPAL REVENUES.

The total municipal income of the various classes of municipalities of Bengal during the year 1872-73 was as follows. The figures do not correspond with those given by the Accountant-General, because some municipalities besides Calcutta, viz. the Suburbs, Howrah, Dacca, and Patna, do not bank with Government, and their monies do not appear in the Government accounts:—

	Rs.
Calcutta	33,05,102
Suburbs of Calcutta and Howrah under Act III of 1864 and special Acts	4,04,243
Municipalities in the interior under Act III of 1864	6,81,069
Municipalities under Act VI of 1868, with one under Act XXVI of 1850	4,64,987
Towns and unions under Act XX of 1856	1,30,191
Total	50,75,592

In this are included the small loans and grants received by municipalities in the interior, but not the large loans raised in Calcutta and classed as extraordinary receipts. These Calcutta extraordinary receipts amounted in all to Rs. 11,77,865 in addition to the amount above stated.

The principal sources of income under the various Acts have been already mentioned in the chapter on municipal administration, but may be here again recapitulated as follows. This statement for 1872-73 includes the suburbs of Calcutta and Howrah; in fact all municipalities except Calcutta :—

	Rs.
Rate on owners according to the yearly value of houses and lands owned in the town	7,29,500
Tax on occupiers of holdings according to their circumstances and property to be protected	5,36,453
Tax on carriages, carts, horses, and elephants	73,821
Fines and fees	92,216
Pounds, ferries, and tolls	1,32,277
Rent of houses, gardens, and markets	38,663
Other sources, including grants from provincial funds and loans	1,67,550
Total ...	17,70,490

The following statement shows the revenues and receipts of the Calcutta Municipality for 1872.

Ordinary receipts :—

	Rs.	A.	P.
House-rate	9,48,876	4	3
Lighting-rate	2,00,331	14	9
Police-rate	2,12,427	15	9
Water-rate and sale of water	4,95,800	8	9
Licenses on professions, trades and callings	2,37,898	5	7
Ditto for carriages and horses	1,10,701	6	8
Registration of carts and hackeries	48,175	9	4
Notice of demand and warrant fees	20,678	0	6
Judicial fines and fines for not taking out licenses	23,134	11	6
Hackney fines	880	15	11
Removal of trade refuse	36,718	4	0
Licenses for public necessities	1,133	0	0
Fees from tolak melters' depôts	25,957	0	0
Fees from slaughter-houses	33,783	5	0
Rent and income of Town Hall	9,795	4	0
Rent of public necessities	22,748	15	3
Ditto of Dhappa Fishery and Lake land	1,170	0	0
Ditto of Skinning Platform	5,050	0	0
Removal of night-soil from private premises	6,829	11	6
Ditto of suburban night-soil	19,200	0	0
Grass-cutting fees, &c., in public squares	1,879	5	0
Hire of Steam Roller	350	0	0
Sale of unclaimed properties, &c., from Pauper Hospital	1,008	13	6
Rent, &c., of Municipal Railway	1,566	9	0
Licenses, &c., for jute ware-houses	31,329	8	0
Miscellaneous receipts	17,214	10	2
Sale of materials, stores, &c.,	68,826	13	8
Value of stores, materials, &c., used in works	6,86,838	8	7

SUSPENSE ACCOUNT.

Income-tax, deposits of contractors' advances refunded, &c., &c.	54,712	3	11
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Total **33,05,102 10 7**

To this may be added extraordinary receipts as follows :-

	Rs.	A.	P.
Drainage Loan from Government ...	6,00,000	0	0
Loan from Government for Municipal Market	2,30,000	0	0
Loan from Government for extension of water-works	2,70,000	0	0
Receipts from the estate of Mr. Marcus ...	47,357	0	9
Sundry receipts on account of private drainage	1,582	7	4
Receipt from Commissioner of Police for work done at Foundling Asylum, &c. ...		111	
Miscellaneous receipts ...		5,241	

SUSPENSE ACCOUNT.

Income-tax, deposits of contractors, old advances adjusted, &c. ...	23,573	6	11
Total ..	11,77,805	11	6

The value of stores used, which appears as a large item in the Calcutta income, is merely a matter of account, being balanced by a corresponding expenditure; and excluding this and some fees for specific services and miscellaneous receipts, the real taxation of Calcutta amounts to somewhat less than 24 lakhs of rupees, say £235,000.

In a former chapter allusion has been made to the lightness of municipal taxation in Bengal, outside Calcutta and the suburbs. The following statement, submitted to the Government of India in the course of the past year, refers both to Calcutta and to the country towns, and shows how the calculation regarding the incidence of taxation in the latter was worked out. The figures are taken from the "Reports regarding taxation in British India," published by the Government of India. It will be observed that the income from taxation is distinguished from receipts from other sources.

"The Lieutenant-Governor has repeatedly admitted that the municipal taxation of Calcutta proper is high even for the capital city of India. The circumstances of Calcutta and the other Presidency towns are so very different from the rest of India, that their taxation cannot usefully be compared with towns in the interior. The comparative incidence of the three Presidency towns must therefore be separately compared. The great city on the Hooghly, the Metropolis of India, is divided into no less than five different municipalities, namely, Calcutta proper, containing all the houses and lands within the Maharatta Ditch and within the original civil jurisdiction of the High Court; Howrah, a large town which has grown up on the opposite bank of the Hooghly River and contains the terminus of the East Indian Railway, the docks of the Calcutta Port, and a number of factories of different kinds; the Suburban Municipality and the two (Northern and Southern) Suburban Towns, which adjoin Calcutta, and which are separated from Calcutta merely by a technical boundary, such as a particular street. The five municipalities form one uninterrupted stretch of houses, except where the Hooghly divides Howrah from the rest of the city; and they are in reality one town, though they are governed under different municipal laws and pay varying rates of municipal taxation. Taking the five municipalities which make the city of Calcutta, we find that their taxation, exclusive

of miscellaneous receipts which are not taxation, compares with the taxation of Bombay and Madras thus—

Year		Population.	Total taxation.	Incidence of taxation per head of the population.
				Ra.
1 of Blue 1871.	Calcutta, inside the Maharatta Ditch	447,001	23,30,500	5.23
	Calcutta, Suburban Municipality	2,57,149	2,88,684	1.10
	Howrah, " " "	97,784	1,34,876	1.37
	North Suburban Town of Calcutta	27,263	20,294	0.74
	South " " "	62,632	14,371	0.22
	Total for Calcutta	892,429	27,84,861	3.12
	Bombay (page 612 Blue Book, year 1872-73)	644,405	20,69,283	4.60
	Madras (page 498 of Blue Book, year 1873-74)	397,552	4,40,531	1.10

"It will be seen that the municipal taxation of Calcutta and its suburbs is lighter than that of Bombay, but much heavier than that of Madras. Regarding the variation in the weight of taxation on the different townships which compose the city of Calcutta, it may be observed that in Calcutta proper, where the Justices have the fullest control over the rate of taxation and are not subject to the control of Government, the taxation is very high; in the Suburban Municipality, and in Howrah, where the Municipal Commissioners have considerable but still restricted powers, the taxation is tolerably high; while in the two Suburban Towns, where the rate of taxation is fixed almost entirely by Government officers, the rate is extremely low.

"Turning now to the consideration of municipalities in the interior, outside the Presidency towns, we find the number and proportion of the population brought within the pale of municipal taxation to be as follows:—

	Total population of the province under regular government outside Presidency towns.	Total population of all municipal towns outside the Presidency towns and Kurachees.	Proportion of municipal to total population.
Bengal	64,000,000	2,400,657	3½ per cent.
Madras	31,000,000	1,077,709	3 "
Bombay	13,250,000	1,488,083	11 "
N. W. Provinces ...	31,500,000	3,535,783	11 "
Punjab	19,500,000	2,408,825	12 "
Oudh	11,500,000	518,291	4½ "
Central Provinces ...	8,250,000	602,463	7½ "

"Thus Bengal has a smaller proportion of her inhabitants under the operation of municipal taxation than any province except Madras, where the municipal townspeople bear a slightly smaller proportion to the general population than in Bengal.

"The returns given in the volume on taxation of some provinces are not so full as for others, and the comparison of taxation cannot be made exactly accurate in all particulars. Some provinces give the actual income for one year and the estimated income for two years; some give only the estimated income for one year; some give the income from taxation proper, as well as the gross receipts from all

sources; while some give only the income from taxation. Some of the provincial statements are not totalled. The several towns have, however, been classified, the different classes of income have been distinguished as far as possible, and totals have been made in this office for the purpose of comparison.

"The statistics of municipal taxation, taken from the volume on taxation and worked out as above, give the following results for large towns containing over 10,000 souls each, for small towns containing less than 10,000 souls, and for all towns, large and small together.

	Incidence per head of the population in places containing over 10,000 souls outside the Presidency towns and Kurrachee.			Incidence per head of the population in places con- taining less than 10,000 souls.		
	Of the gross muni- cipal receipts.	Of the municipal income from muni- cipal taxation.		Of the gross muni- cipal receipts.	Of the gross muni- cipal income from municipal taxation.	
	Rs. A. P.	Rs. A. P.		Rs. A. P.	Rs. A. P.	
Bengal	0 7 8	0 5 10		0 6 6	0 5 10	
Madras	not shown	0 11 11		there are no small municipal towns in Madras.		
Bombay	1 1 6	1 0 8		0 7 6	0 6 6	
N. W. Provinces...	not shown	0 11 3		not shown	0 4 5	
Punjab	ditto	0 15 7		ditto	0 6 1	
Oudh	not separately shown	0 10 3		not separately shown	0 6 6	
Central Provinces	1 0 7	0 15 0		0 11 2	0 11 2	

"The incidence of municipal taxation on all municipal towns, both large and small, may be compared thus—

	Incidence per head of the population of all municipal towns, both large and small.		
	Of the gross municipal receipts.	Of the municipal income from taxation.	
	Rs. A. P.	Rs. A. P.	
Bengal	0 7 5	0 5 10	
Madras	not shown	0 11 11	
Bombay	0 13 11	0 13 3	
North-Western Provinces	not shown	0 8 5	
Punjab	ditto	0 11 5	
Oudh	0 11 6	0 9 9	
Central Provinces	0 14 7	0 13 5	

"It will be seen that the general incidence of municipal taxation in Bengal is less than half the average incidence for the rest of India; that the average incidence in the North-Western Provinces is 44 per cent. higher than in Bengal; while in other provinces the incidence is from 72 per cent. to 133 per cent. higher than in Bengal. For towns containing more than 10,000 souls, the incidence of municipal taxation in other provinces is from 76 per cent. to 164 per cent. more than in Bengal. For small towns containing less than 10,000 souls, the incidence of municipal taxation in Bengal is about the same as in most other provinces, except the North-Western Provinces, where the incidence is 24 per cent. smaller, a very large number of petty places being there lightly taxed for police purposes only."

CHAPTER XXIII.

BIRTHS AND DEATHS.

For some years past attempts have been made to collect statistics of births and deaths from the whole area of these provinces. The inaccuracy of the results obtained has, however, always been notorious. Exceptional difficulties beset the Sanitary Commissioner for Bengal. His returns have always been incomplete from every district, and absolutely untrustworthy. In 1871 the mortality in Bengal, with a population of 66 millions, was registered at 260,331, which is only a proportion of four in a thousand. The reports of previous years have shown even more unsatisfactory results than this.

In the following table, which the Lieutenant-Governor has taken from the Sanitary Commissioner's report, the districts of Bengal are arranged in order as to efficiency in mortuary registration in 1871:—

Mortality over 10 per 1,000.		From 5 to 10 per 1,000.		From 3 to 5 per 1,000.		Under 3 per 1,000.	
Serampore sub-division	14.3	Kamroop ...	9.8	Bhaugulpore ...	4.9	Furreedpore ...	2.8
Nowgong	11.8	Singbloom ...	8.6	Howrah ...	4.6	Patna ...	2.6
Gowalpara	10.6	Sibsauror ...	8.2	Moorshedabad ...	4.3	Julpigoree ...	2.5
Beerbloom	10.1	Jessore ...	7.9	Maldah ...	4.2	Pubna ...	2.5
		Burdwan ...	7.8	Manbhoom ...	3.9	Shahabad ...	2.4
		Chittagong ...	7.5	Pooree ...	3.6	Midnapore ...	2.4
		Hooghly ...	7.4	Nuddea ...	3.6	Backergunj ...	2.2
		Cuttack ...	7.3	Sarun ...	3.6	Tipperah ...	2.1
		Bancoorah ...	7	Chumparun ...	3.1	Dacca ...	2.1
		Rajshahye ...	6.9	Dinapore ...	3.1	Monghyr ...	1.9
		Bogra ...	6.9	Balasore ...	3.1	Sylhet ...	1.8
		Hazareebaugh ...	6.4			Kungpore ...	1.7
		Lohardugga ...	6.1			Cachar ...	1.6
		Darjeeling ...	5.7			Purneah ...	1.5
		Noakhally ...	5.7			Mymensing ...	1
		24-Pergunnahs ...	5.3				

Nothing could prove the worthlessness of the returns more clearly than the figures displayed in this statement. The figures for the district of Mymensing, showing a death-rate of 1 per 1,000, would be ridiculously, if they were not deplorably, wrong. Dr. Jackson also remarks that in Burdwan, where so fatal an epidemic was raging, it is probable that not more than one death in several can have been reported.

Dr. Jackson proceeds to show by an interesting analysis that there is a special defect in all districts in the registration of female and of infant mortality. It is in infant mortality that the greatest deficiency appears. In England the deaths of persons under five years of age form 41·1 per cent. of the total mortality; in Bengal they form only 15·8 per cent. It may be possible that infant mortality may not be so great in India as it is among the poorer classes of the great cities of western countries; but the disproportion cannot approach to what it amounts to in these returns.

The Lieutenant-Governor has, however, already succeeded in effecting in the present year a tentative reform in the system under which mortuary and vital statistics are acquired. He has freely confessed that the acquisition of accurate statistics is at present impossible over the enormous areas which compose our districts with their vast populations and uneducated agencies; and, while not relinquishing the attempt to do what can be done towards a complete registration, it has been resolved in the meantime to perfect the system on a smaller scale over certain experimental selected areas both urban and rural in every district. These areas have been chosen, as far as was possible, with reference to their geographical situation, so as to be accessible and easily supervised, and it was arranged beforehand that the census should be taken in them with particular care.

At least one town area and one country area have been selected in each district. The town area selected has usually been the headquarters station of the district. The area of the rural registration has been limited to a moderate number of villages, compactly situated, with a population, as a rule, of from 10 to 30,000 inhabitants. In the town areas the duty of collecting these statistics has been generally met and discharged by the Municipal Commissioners, supplemented by a grant from Government. For the rural areas a small special expenditure has been sanctioned. A very wide discretion has in all cases been allowed to the local officers in appointing the agency to collect these returns. It was left to their discretion also whether the registration of births should be included in the first instance.

In order to facilitate these returns, the Lieutenant-Governor has sanctioned the recommendation which had been repeatedly urged upon Government by successive Sanitary Commissioners and by district officers, for allowing a sanitary clerk to all Civil Surgeons, to aid them in the compilation of vital statistics, which in these provinces, as elsewhere, is a duty imposed upon the medical officer.

The registration of sanitary statistics from the selected areas in Bengal started fair from most of the localities in the provinces from the 1st January 1873, and reports have been received from the Sanitary Commissioner on the results which have been collected during the first two quarters of the year. They present undoubtedly a very great improvement on what have hitherto been submitted. In some cases they are no doubt fairly correct, in others very approximately accurate, and in very few are they very widely wrong.

The areas selected are 101 in number, comprising a population of nearly two millions (1,922,608). The gross mortality of each quarter is returned as follows:—

	1st quarter.	2nd quarter.
Towns	5·8 per mille.	7·38 per mille.
Rural areas	4·3 "	5·01 "
Combined areas	5·1 "	6·05 "

Or as given in the usual form per annum per mille.—

	1st quarter.	2nd quarter.	Mean annual rate of the six months.
Towns	23·2	29·52	26·36
Rural	17·2	20·01	18·62
Combined areas	20·4	24·20	22·03

That the actual mortality is higher than these ratios, is certain, but it is satisfactory to have made so decided a step as this in advance towards the truth. It is especially satisfactory to note the improved registration evinced during the second quarter, when more experience had been gained.

The mortality according to sex during the two quarters under review compares thus:—

	1st quarter.	2nd quarter.	Mean of the six months per 1,000 per annum.
<i>Rural areas—</i>			
Males	4·8	5·4	20·4
Females	4·0	4·3	16·6
<i>Town areas—</i>			
Males	6·60	7·9	29·0
Females	6·03	6·6	25·38
<i>Combined areas—</i>			
Males	5·0	6·5	23·0
Females	4·7	5·3	20·0

The female registration is therefore shown proportionately defective, as might have been expected.

The mortality according to age is returned as follows:—

	Per cent. of gross mortality.
Under one year	13·4
One to six years	18·2
Six to twelve years	9·4
Adults	58·6
Total	99·6

The English rates meanwhile are—

Under one year	24·5 per cent. of gross mortality.
" five years	41·1 ditto ditto.

It has already been suggested that infant life may be better in India than in England, but there is suspicion that in great part it is the defective registration of infant mortality in India that makes the death-rate abnormally low. The death of an adult is an event in the family and in the village where it takes place: the death of a child, a few weeks, or months old,—no event at all.

Statements are given in the Appendix which show in detail the selected areas of Bengal and the ratio of their mortality during the

first half year of 1873. The following areas show a mortality at a rate of more than 30 per thousand of the population per annum :—

Urban areas.	Death-rate per mille per annum during first half year, 1873.	Rural areas.	Death-rate per mille per annum during first half year, 1873.
Gora Bazaar, Moorshedabad ...	67·3	Rajshahye ...	63·8
Burdwan ...	61·6	Kamroop ...	47·8
Tezporo ...	57·7	Maldah ...	42·1
Gowhatty ...	54·2	Cachar ...	41·0
Gonpara ...	48·1	Patna ...	40·8
Parneah ...	43·3	Goalpara ...	40·4
Dinagopore ...	40·0	Dinagopore ...	37·9
Debrooghur ...	37·4	Noacolly ...	36·8
Maldah ...	36·5	Purneah ...	35·0
North Suburban town ...	35·5	Beerbhoom... ..	34·5
Darjeeling ...	34·2	Sonthal Pergunnahs ...	33·0
Lohardugga ...	34·0	Bograh ...	31·0
Part of the towns of Patna and of			
Behar ...	32·8		
Bancoorah ...	30·6		
Monghyr ...	30·3		

It is probable that these results are approximately correct, and we know that among some of these areas, where the mortality is highest, there have been epidemics of fever and cholera which have raised the death-rates. On the other hand, it is to be remembered that, as a rule, the first half of the year in Bengal is the healthiest half. The areas selected and quoted above are scattered, and not specially unhealthy localities. These figures are not sufficient for us to generalise from, but they seem to shew that the death-rate in Bengal is high. By way of comparison it may be mentioned that the highest annual death-rates registered in England are 40 per thousand, the lowest 17 per thousand, and that the annual average death-rate in England is 22·4 per thousand.

The localities above specified are those in which the selected area system has proved most successful. In some cases it has failed. The town areas of Julpigoree, Dacca, Furreedpore, Sylhet, and Cachar, and the rural tracts of Burdwan, 24-Pergunnahs, Nuddea, Julpigoree, Dacca, Sylhet, Gya, Singbhoom, Maumbhoom, and Seesaugor, are so far a failure that they all return a death-rate of less than 15 per thousand. As yet the system has been most successful in the divisions of Rajshahye and in Assam. In Assam the special indigenous agencies that exist render the task an easier one than elsewhere. The system has been least successful in the Presidency and Dacca divisions, where unfortunately the indigenous native agencies have been suffered to die out more completely than in other parts of Bengal. In the rural areas failure has most frequently resulted from the area chosen having been too large to manage and superintend properly, but the difficulties which in this respect have been brought to light are now being remedied. The unsatisfactory nature of the Burdwan rural returns in particular is attributable to the excessively large and unmanageable area that had been selected.

A comparative statement is annexed below which shows the rate of mortality in the different months of the year in a few special localities, where it is reported that special pains have been taken to secure correct registration.

Statement showing ratio of mortality per thousand, in each month of the year in a few special areas, 1872-73.

NAME OF MONTH.	Calcutta: popu- lation 447,001.		Suburbs of Calcutta: popu- lation 257,140.	Town of Burdwan: popu- lation 32,321.	Barnagore or North Suburban town near Calcutta: popu- lation 27,263.		Nattore town, distric- t Raj- shahye: popu- lation 9,074.	Rural Tract, Nowhatta, in Raj- shahye: popu- lation 22,080.
	1872.	1873.	1873.	1873.	1872.	1873.	1873.	1873.
January .. .	29.2	32.6	45.6	66.4	.....	54.1	28.5	35.3
February	21.2	25.4	37.8	51.9	.....	38.2	31.0	29.8
March	22.3	26.7	44.6	64.0	.....	32.5	32.2	57.0
April	22.9	24.5	34.9	55.0	.....	34.7	45.8	120.1
May	21.8	22.2	32.8	60.1	.....	32.5	40.9	66.3
June	16.5	20.2	26.2	50.8	.....	22.4	26.0	25.0
July	21.0	19.4	25.7	42.3	.....	18.4	12.3	31.7
August	27.1	24.4	33.3	51.9	....	32.5	19.8	10.0
September	26.1	23.1	34.7	47.5	.....	25.5	28.5	23.9
October	28.5	25.3	29.6	56.0	80.7	45.3	42.2	42.3
November	39.5	33.0	52.3	45.2	114.1	65.3	35.9	36.9
December	44.3	.....	....	.....	89.0	... ..	.....	... ..

There is much that is very interesting in this statement. It must be premised that the present year, 1873, for which the returns are mostly given, has not been at all an unhealthy year in Bengal; indeed it has been the reverse. There has as yet been no such mortality during the rains and cold weather as usually marks these seasons. The fever in Burdwan has been of a much less severe type, and has been far less fatal than in recent years. The town of Burdwan itself, for which the figures are furnished, has practically escaped the fever, and has not suffered from its re-appearance, dwelt on in another chapter of this report, over the western part of the district. Yet the average death-rate in the town of Burdwan for the year has not been less than 53.8. In Barnagore the thriving and busy suburb of Calcutta, known as the North Suburban town, where there has been an entire absence of the epidemic so fatal there during the concluding months of 1872, and where cholera has been very rare, the mortality averages 36.5 per thousand. In the populous suburbs of Calcutta, where untiring pains are given by the municipality to improve the sanitation, and where their efforts are undoubtedly very successful, the mortality is registered at 36.1 per thousand. In the town of Nattore, in the district of Rajshahye, the rate is 31.2, and in the rural tract of that district the rate is 42.5 per thousand. The ratio of mortality in the rural tract is, however, enhanced by an epidemic of cholera in the spring which nearly doubled the number of ordinary deaths in March, April, and May. The town of Calcutta, and the figures returned for the city, 26.4 for 1872 and 25.1 for 1873, are wholly abnormal: it is doubtful whether they are to be implicitly trusted; but this question is fully discussed later on in this chapter.

The first conclusion forced on us by these figures is the high death-rate shown. In the second place it may be said that these figures are sufficient to indicate very vividly the comparative healthiness and unhealthiness of the various seasons of the year.

The months immediately before the regular rains set in are the healthiest in the year. June, it is believed, is generally the healthiest

month, but this year, owing to the late setting in of the rains, July has taken the pre-eminence. August follows as the next healthiest month,—a position it owes to the very scanty rain of the season, which kept the autumn mildly warm without its customary damp. May, April, and March, follow next; then February and October, the two transition months of the season; and November, December, and January, the regular cold weather, are left as the unhealthiest season. These generalizations are corroborated by the statistical results of hospital, jail, and other sickness and mortality; at the same time we must await the records of other years before we can venture to pronounce with certainty upon the inference of the present. The figures we have now before us are a nucleus round which we may collect other figures, and they are more carefully acquired, and more trustworthy, than any figures of the same nature that have previously been collected in Bengal. Although the mortality is greatest in the cold weather months, this may be in great part the consequence of the enervating influence of the previous season.

Birth statistics.

The returns of birth statistics for the two first quarters of 1873 compare as follows:—

PER 1,000 PER ANNUM.

Town areas.	1st quarter.	2nd quarter.	Mean of the six months.
Bancoorah ...	3.20	10.0	6.6
Beerbhoom ...	12.76	13.2	12.9
Moorsheadabad ...	4.80	30.0	17.4
Malda ...	15.61	15.6	15.60
Darjeeling ...	8.52	55.6	32.6
Julpigoree ...	0.24	8.8	4.5
Goalparah ...	7.61	26.8	17.2
Cachar ...	4.28	6.4	5.3
Patna ...	11.52	15.6	13.5
Shahabad ...	6.72	13.6	10.1
Chumparun ...	2.56	13.2	7.8
Sonthal Pergunnahs	16.32	21.2	18.7
Cuttack ..	8.96	30.4	19.6
Hazareebaugh ...	4.16	47.6	5.8
Kamroop ...	30.48	30.0	30.2
Nowgong ...	7.68	11.6	9.6

PER 1,000 PER ANNUM.

Rural areas—	1st quarter.	2nd quarter.	Mean of the six months.
Bancoorah ...	8.96	24.0	16.4
Beerbhoom ...	15.84	...	...
Moorsheadabad ...	13.64	24.8	19.2
Malda ...	23.68	28.0	25.8
Darjeeling ...	3.12	4.0	3.5
Julpigoree ...	8.08	14.8	11.4
Goalparah ...	7.44	37.6	22.5
Cachar ...	16.96	40.4	28.6
Patna ...	15.52	24.8	20.1
Shahabad ...	15.16	22.8	18.9
Chumparun ...	3.04	22.4	12.7
Sonthal Pergunnahs	2.96	28.4	15.6
Cuttack ...	15.20	52.0	33.6
Hazareebaugh ...	5.76	44.8	25.2
Kamroop ...	9.04	27.6	18.3
Nowgong ...	11.44	23.2	17.8

It is clear that these returns of birth are imperfect, though, like the mortuary returns, they evince a great improvement in the results of the second quarter over those of the first, and in point of fact Government has not yet much pressed for returns of birth, or insisted upon their being rendered for all areas. It is far more difficult to secure accuracy in the registration of births than in that of deaths, and the Lieutenant-Governor has not been willing to hazard the success of the experiments now initiated by aiming at too much in the first instance. Where birth returns are rendered, special pains have now been enjoined to make them correct; but for the present the chief object of the selected area system has been to arrive at accuracy in the rate of mortality, and much will have been done if in the course of a year or two we shall have obtained trustworthy statistics on this point. Some of the death returns are, as we have seen, very good; the system may be said to be already an assured success, and the Lieutenant-Governor does not doubt that the selected areas do promise to give us at no distant time trustworthy death-rates. When these are more complete—and in some areas they are already complete—the correct registration of births will be more pressed.

The results of the inquiry directed by the Secretary of State

Recorded deaths in Calcutta in 1872.

into the vital statistics of Calcutta, as far as the inquiry has yet been carried out, are given at some length subsequently in this chapter. During the year 1872 the deaths in Calcutta were recorded at 11,825, a proportion which, calculated on the population returns of the late census, amounts to 26·40 per thousand. The table of special areas already given shows that the total mortality in Calcutta from all diseases combined was at the highest rate in October, November, and December, and at the lowest in June. Fever, which carried off 5,003 persons, or 11·20 per thousand of the population, was most fatal in December; dysentery prevailed with the greatest intensity in January, November, and December; cholera (from which 1,142 or 2·50 per thousand died) committed the greatest havoc in December, and the next highest death-rates from this disease occurred in February, October, and November; diarrhoea caused the greatest loss of life in November and December; small-pox in January.

The total ratio of Christian deaths bear a proportion to the Christian population of 33·5 per thousand, of Hindoo deaths to the Hindoo population 27·7, and of Mahomedan deaths to the Mahomedan population 22·8. The mortality in relation to sex was, males 23·4, females 32·3, showing a higher proportion of deaths among females improbable in itself, and not supported by the experience of other localities.

The mortality in the Calcutta Police was 65 out of 3,208, showing a death-rate of 20·26 per thousand.

There were 470 deaths in 1872 among the regular District Police in the interior exclusive of Assam, against 394 in the previous year, or a rate of 21·0 against 19 per thousand in the previous year. No return has been received from the Garo Hills,

Mortality among the police in the interior.

in which the mortality amounted to 10 per cent in 1871. The highest death-rate was in Hooghly, where 22 men died out of a force of 442. Darjeeling and Julpigoree are the next in the list. The latter district appeared among the least healthy in the last year's report. Bancoorah, Pubna, Furreedpore, Noakally, Maunbhoom, and Cuttaok, each shew less than ten deaths per thousand. In Assam 23 men died out of a strength of 1,629.

An account of the incidence of jail mortality is incorporated in this report in the chapter on prisons.

Mortality among prisoners in jail.

A brief abstract is given in the present chapter to complete in one place the record of such information as we have available on the subject of births and deaths in the past year. The average jail population of 1872, including all classes in jails and lock-ups, was 20,489 persons, and the deaths amounted to 1,063, showing a mortality rate of 51.9 per thousand. In 1871 the deaths among all classes in jails and lock-ups were 759, or 40.1 per thousand among an average population of 18,919 persons. The mortality during the year 1872 had thus increased owing to severe outbreaks of cholera and the general unhealthiness of the year.

There were 135 deaths from cholera, 332 from dysentery, 125 from fever, and 120 from diarrhoea. There were more than twice the number of deaths from cholera in 1872 than there had been in the preceding year, when there were only 56 deaths from this cause. The ratio per thousand of deaths from cholera to average strength in jail was 6.8 per thousand in 1872, against 3.2 in 1871. Dysentery was also more fatal than usual. It carried off 17.2 per thousand of the jail population, against 13.4, 10.8, and 13.2 in the three preceding years. The proportion of the number of deaths from fever and diarrhoea was 6.2 per thousand in each case, against 4.1 from fever and 3.8 from diarrhoea in the preceding year.

The rate of mortality was highest during August and the three following months. In August the death-rates (calculated per thousand per annum) were at the rate of 96 per mille, in September at the rate of 60, in October at 72, and in November at 60. The healthiest months of the year, as shown by the jail mortality, were March, April, and June, when the mortality was at the rate of 28, 33, and 33 per thousand, respectively.

CALCUTTA VITAL STATISTICS.

The Army Sanitary Commission in England, in a memorandum on the administration report of the

Vital Statistics in Calcutta. Report called for by Secretary of State.

Calcutta municipality for 1870, having invited especial attention to certain points regarding the mortality returns "which appeared to cast serious doubts on their value, and to require consideration in India," the Secretary of State desired in the end of 1872 that a special report on the subject might be submitted. A careful inquiry has accordingly been made into the subject by Government and the municipality during the past year.

The annexed table shows the return of deaths from 1865
Statistics of death, to 1872:--

	1865.		1866.		1867.		1868.		1869.		1870.		1871.		1872.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Total deaths	23,242		20,293		12,697		13,733		12,795		10,102		10,300		11,823	
Christians	816	443	728	346	453	240	478	343	463	239	392	263	353	276	430	285
Hindoo	9,307	6,049	8,081	4,982	4,417	3,100	5,532	3,356	5,118	3,257	4,009	2,794	4,090	2,766	4,777	3,298
Mahomedans	3,976	2,638	3,898	2,219	2,266	1,599	2,521	1,474	2,268	1,406	1,602	1,030	1,678	1,128	1,829	1,201
Others	17	5	28	1	17	5	22	7	12	2	10	2	2	1	3	..
Total	14,116	9,126	12,735	7,543	7,153	4,944	8,553	5,180	7,891	4,904	6,013	4,089	6,129	4,171	7,039	4,784

These figures show a decrease, in the space of five or six years, of mortality from upwards of twenty thousand deaths a year to between ten and eleven thousand only. If this be a fact, it is a fact unprecedented in sanitation. Can it be true, it has been asked, that while 23,042 persons died in Calcutta in 1865 (when there was no famine), and more than 20,000 in the next year (when there was famine in the provinces), that only 10,102 died in 1870; 10,300 in 1871; and 11,823 in 1872. The interest of this inquiry becomes of the first importance when we are told that this decrease is simply the result of improved sanitation, or in other words that upwards of 10,000 lives a year are being saved by the mere adoption of a proper water-supply and effective drainage.

The system under which births and deaths have been and are collected in the city is as follows. The

System of registration.

Justices are empowered under Section 94, Act VI (B. C.) of 1863, to keep a register, and Sections 98 and 99 of the Act render it penal on those who are bound to give information to refuse or neglect to do so. In 1864 the registration was first introduced, the town being divided into six districts for the purpose. The registrars appointed were with one exception medical men with some practice amongst their countrymen. In April 1868 these paid posts were abolished, partly on the ground of economy, and partly because the accuracy of the returns were suspected, and the duties of the registrars were transferred to the police inspectors of the twenty-one sections into which Calcutta is divided for police purposes. The collection of the statistics has always been supervised by the Health Officer of the Justices. The mortuary data are now obtained from two sources. One set of returns is submitted weekly by each police inspector of the deaths occurring within his jurisdiction, whilst a second set is obtained from the sextons of the Christian cemeteries and the clerks at the several burning-ghauts and burial-grounds in the town and suburbs. The clerks are paid servants of the Justices employed in this duty alone, and they ascertain from those accompanying a corpse where the death occurred. Separate lists are prepared and furnished to the Health Officer of all deaths occurring in the suburbs.

Under the old system before 1868 were included only the births and deaths which occurred within the street boundaries of the town: under the new system not only the town is included, but also the Fort, Maidan, Coolie Bazaar, and the river boats and shipping.

It is the general conviction that an important change for the better has taken place in the sanitary condition of Calcutta, and it is impossible to attribute so general a conviction simply to the improvement shown in the mortuary returns. It is more than probable that the city is far healthier than formerly. That this is a fact would seem to be strongly corroborated by the return of mortality supplied by the Calcutta hospitals. The following statement illustrates the prevalence of cholera in Calcutta from the year 1866 to 1871, and shows the proportion of cholera deaths in hospital, of the number of which there can be no doubt, to the cholera deaths reported by the Municipality. The hospitals referred to are the Medical

No doubt that city is healthier than formerly.

College Hospital, the General Hospital, the Chandney Hospital, and the Municipal Pauper Hospital :—

	No. of cholera deaths in hospital.	No. of cholera deaths reported by Municipality.	Percentage of hospital deaths from cholera to those reported by the Municipality.
1866... ..	938	6,826	7.3
1867	305	2,268	7.4
1868... ..	487	4,178	8.6
1869	483	3,592	7.4
1870... ..	210	1,560	7.4
1871	92	790	8.6

The number of deaths from cholera reported by the Municipality is strongly corroborated by the fact that the number of cholera deaths in hospital preserves an almost even ratio of proportion. In the same connexion also it may be mentioned that at the four hospitals taken together—

In 1868	179	Persons died out of every 1,000 patients admitted.
„ 1869	151	
„ 1870	153	
„ 1871	126	

Thus showing, no doubt, a healthier tendency among the patients.

On the other hand there are many striking elements of suspicion in the mortuary returns as they now appear. We are told that the gross

Grounds for suspecting the accuracy of the mortuary returns.

mortality of the city from 1868 to 1872 inclusive was but 59,372, of which no less than 19,677 were deaths of children under six years old. This would leave a mortality amongst all classes above six years of 39,695 or 7,939 a year, in a population of 413,137, or an annual rate of but 19.2 per 1,000 amongst persons of six years and upwards.

Throughout the whole period under review the death returns for all classes outside the Christian, Mahomedan, and Hindoo communities are shown as follows :—

	Males.	Females.	Total.
1865	16	5	21
1866	28	1	29
1867	17	5	22
1868	22	7	29
1869	12	2	14
1870	10	2	12
1871	2	1	3
1872	3	...	3
			<u>133</u>

Thus we have 133 deaths returned as the mortality of a population of nearly 2,000 persons (1,920, census of 1872,) in eight years. In the last two years the casualties amongst these classes are declared to have been only six in number, while we may be reasonably certain that

they were many times as numerous. At the same time it must be recollected that among these small communities the Chinese and Parsees are so peculiar in the disposal of their dead and their places of sepulchre, that if we are to take them as a test alone the case would not be conclusive.

But turning to the Christian population of the city, we find ourselves in the presence of no less anomaly. The census returns of 1866 and 1872 respectively make the strength of this part of the population as follows:—

					Males.	Females.	Total.
1866	...	...	...	...	13,531	9,460	22,991
1872	...	...	...	...	12,917	8,439	21,356

It is difficult to suppose that there are really 1,021 less Christian females in Calcutta in 1873 than there were in 1866, but such is the fact if the returns are to be trusted.

The mortality registers meanwhile show a death-rate in 1865-66 of 66·2 males to 32·8 females, while the death-rate of the six years 1867-1872 accords with the census, and is 60·3 males to 39·7 females. More male children being born than female, the death-rate of the former is ever normally somewhat in excess of the latter; and the earlier returns accord with the fact, while the later ones show no appreciable difference between them, although, according to the census (1872), the children of the Christian population consisted of 1,693 males to 1,272 females. Either the census therefore is wrong, or the mortuary returns. The Census of Calcutta is unfortunately not at all trustworthy. The mortality returns, if correct, would probably show the ratio of mortality amongst the Christian male population to the female to be something like what it was in 1865-66.

The proportion of deaths between the sexes generally from 1865 to 1872, according to the returns, was as follows:—

						Males.	Females.
1865	...	...	...	...	...	60·7	39·3
1866	...	...	...	...	...	62·8	37·2
1867	...	...	...	...	...	59·1	40·9
1868	...	...	...	...	...	62·3	37·7
1869	...	...	...	...	...	61·7	38·3
1870	...	...	...	...	...	59·5	40·5
1871	...	...	...	...	...	59·5	40·5
1872	...	...	...	...	...	59·5	40·5

Thus the average throughout the whole period was 60·6 males to 39·3 of females, a proportion that corresponds closely with the census of 1866, according to which the proportion between the sexes was 61·2 men to 38·8 women.

The correspondence is perhaps too close for accuracy, as the male death-rate should exceed the female. But the census of 1872 sets all comparison at defiance, since according to these returns but one-third of the population is female, the proportion being 67 males to 33 females. The mortuary returns are thus completely at variance with the census, for while the mortality of the last three years points to the existence of a growing proportion of females in the city, the census shows a heavy falling off in their numbers—

		Males.	Females.
Ratio of mortality in 1870-1872	...	59·5	40·4
Population according to new census		67·0	33·0

In last year's report, and in the chapter of the general report which deals with the census results, it has been explained that while throughout the country generally the census was very successfully taken with fair accuracy, there was the greatest doubt regarding the accuracy of the census of Calcutta taken by the Justices.

The figures sufficiently show that the mortuary statistics are not wholly accurate, but it may be that the error is rather in the census than in the mortuary returns. Probably the population is understated, and especially the female. The one fact of the excessive disproportion and inconsistency in the ratio of sexes demonstrates that we cannot trust the returns implicitly. It is still perhaps, however, too soon to give a decided opinion on the question, and farther inquiries are still being worked out under the Lieutenant-Governor's directions. It is not yet quite clear how the returns of the burial and burning enumerations are checked and compared with the police returns; in what proportion the police returns are actually found to be deficient, and whether there are any vital differences in the systems of enumeration of 1865 and of 1870-72, which would lead to so very large a difference of result. Investigation is also being made into the rate of mortality in different classes of the population in each or any of the last ten years; into the rate of mortality from different diseases, at different ages, and in different quarters of the town, or in towns and suburbs, respectively, if any quarters are distinguished.

The city of Calcutta is so wholly abnormal as regards the numerical proportion of the sexes, and the birth returns are so incorrect, and would be of so little value even if they were correct, that the inquiry into birth statistics is of very secondary importance.

Statistics of birth.

The annexed table shows the return of births furnished by the Municipality from 1865 to 1872—

	1865		1866		1867		1868		1869		1870		1871		1872	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Total Births ...	5,993	4,970	4,838	5,642	5,004	5,261	5,169	4,662								
Christians ..	407	389	345	337	351	316	300	279	257	268	342	248	285	218	203	216
Hindoes ..	1,972	1,688	1,610	1,503	1,637	1,438	1,822	1,682	1,935	1,885	1,784	1,594	1,833	1,594	1,641	1,412
Mahomedans ..	811	711	602	561	598	489	762	677	805	749	682	636	672	540	592	495
Others ..	10	5	3	9	4	6	15	5	10	4	4	1	3	4	1	2
Total ..	3,200	2,793	2,560	2,410	2,590	2,248	2,939	2,643	3,057	2,807	2,772	2,479	2,793	2,376	2,437	3,125

According to the returns of the Calcutta census of January 1872,
the number of children not exceeding
one year of age is as follows:—

Analysis of the figures.

CHRISTIANS	{	Males	...	...	...	...	...	...	...	408
		Females	...	...	...	...	...	...	...	308
	Total									716
HINDOOS	{	Males	...	...	...	...	...	...	...	2,823
		Females	...	...	...	...	...	...	...	2,732
	Total									5,555
MAHOMEDANS	{	Males	...	...	...	...	...	...	...	1,214
		Females	...	...	...	...	...	...	...	398
	Total									1,612
OTHERS	{	Males	...	...	...	...	...	...	...	21
		Females	...	...	...	...	...	...	...	7
	Total									28
GRAND TOTAL	{	Males	...	...	...	...	...	...	...	4,464
		Females	...	...	...	...	...	...	...	3,445
	Total									7,909

In examining these figures it will be observed that the male births
invariably preponderate; thus—

In 1865	...	...	...	53	per cent. of the births reported are males.
" 1866	...	...	...	51	" " "
" 1867	...	...	...	53	" " "
" 1868	...	...	...	53	" " "
" 1869	...	...	...	51	" " "
" 1870	...	...	...	52	" " "
" 1871	...	...	...	54	" " "
" 1872	...	...	...	53	" " "
" the census of January 1872	...	...	...	56	" of the children less than one year old are males.

If we carry on our analysis into the great divisions of the population we find that of Christians—

In 1871	...	...	...	54.5	per cent. of the births reported are males.
" 1872	...	...	...	48.4	" " "
" the census of January 1872	...	...	...	56.8	" of children under "one year" of age are males

We find that of Hindoos—

In 1871	...	...	...	53.5	per cent. of the births reported are males.
" 1872	...	...	...	53.7	" " "
" the census of January 1872	...	...	...	50.8	" of children under "one year" of age are males.

We find that of Mussulmans—

In 1871	...	...	...	55.4	per cent. of the births reported are males.
" 1872	...	...	...	54.4	" " "
" the census of January 1872	...	...	...	75.3	" of children under "one year" of age are males.

And that of others in which are included Chinese, Jews, Parsees, &c.—

In 1871	...	...	...	42.9	per cent. of the births reported are males.
" 1872	...	...	...	33.3	" " "
" the census of January 1872	...	...	...	75.0	" of children under "one year" of age are males.

Proceeding to another point, and limiting ourselves to the two principal classes of the community, it may be noted that of the whole population of Calcutta according to the late census—

66.0 per cent. are Hindoos.
29.0 „ „ are Mussulmans.

And that this percentage is almost exactly maintained among the population from twelve years to forty years of age (Hindoos 64.7 per cent., Mussulmans 30.9 per cent.), within which limits all the people who get children may be said to fall.

But according to the record of births, while—

In 1871	...	...	66.3 per cent. of the whole are Hindoos.
„ 1872	...	...	68.9 „ „ „
„ 1871 only	...	23.4	„ „ „ Mussulmans.
and „ 1872	...	23.8	„ „ „ „

In the census also of January 1872 no less than 70.2 per cent. of children not exceeding one year of age are Hindoos, while only 20.3 per cent are Mussulmans.

Applying, moreover, one more test, and contrasting the census with the vital returns, we find that the census gives 714 Christian children under one year of age to 523 births reported in the previous year; 5,555 Hindoo children to 3,427 births; 1,612 Mahomedan children to 1,212 births; and 28 children of other classes to 7 births. The total number of children under one year of age according to the census of January 1872 is 7,909; the total number of births reported by the Municipality in the previous year is only 5,169.

Lastly it would appear that for the past four years the number of births recorded is on the steady decrease, and that in the last year, 1872, the decrease is enormous; the total number in each class of the community being smaller than it has been in any year since these figures began to be collected.

The general result of these calculations show that the birth statistics of the Calcutta Municipality are untrustworthy. The consistent and large preponderance of male over

Calcutta birth statistics wholly inaccurate.

female births is full of suspicion and throws discredit on the whole. It can admit of no satisfactory explanation. The preponderance is most marked in the case of Mussulmans. The inconsistencies of the birth statistics with the census returns are fatal to the accuracy of the former. They show plainly that a large proportion of births, and in particular of Mahomedan births, are suppressed. At the same time some conspicuous blunders in the census are made apparent. Many girl-babies have evidently not been entered in the census, and among Mahomedans at least 25 per cent have not been entered. The returns of boy-babies may perhaps be trusted.

The Municipality registers show only four or five thousand births in Calcutta per annum; if the returns were accurate, it is estimated that they would show about eight or nine thousand.

CHAPTER XXIV.

EMIGRATION.

LAST year's report set out with considerable fullness the defects in the system of emigration and the measures taken to remedy these evils so far as lay in the power of this Government. Emigration has this year been very active, and on the whole conducted on more satisfactory terms.

EMIGRATION TO THE COLONIES.

The principal features in the returns are the great increase in the number of emigrants despatched to the British colonies, and the addition, by convention made with Her Majesty's Secretary of State for Foreign Affairs, of the Dutch colony of Surinam to the places which draw upon India for agricultural labour. During the years 1870-71 and 1871-72 the annual despatch of emigrants was but little over 8,000. In the past year it rose to 17,171; Demarara alone taking 6,087, Mauritius 5,262, Trinidad 3,850, Jamaica 1,562, and Surinam 410. These figures represent the number of souls embarked. Simultaneously with this development of emigration the terms offered by the colonies to their imported labourers have been put upon a clearer and surer basis than heretofore, a minimum rate of wages being now provided by law in nearly all cases. St. Vincent offering lower terms than any other colony, and guaranteeing no minimum rate of wages, was unable to get labour. As regards Surinam the terms offered are fair enough, following as closely as possible those provided for British Guiana.

Of course with such an increased demand for labour, the number of recruiters has been largely increased, viz. from 171 to 258.

Recruiters.

The system of preliminary inquiry into character before granting license insisted on by the Lieutenant-Governor has resulted in fewer cases of cancelment for misbehaviour, only nine in all being reported during the year. His Honor is nevertheless far from being satisfied that the recruiters as a class are under proper control, or are generally a reliable body of men. It is believed, however, that the Emigration Agents are now themselves impressed with the necessity of getting more trustworthy servants, and it may be hoped that through their co-operation, and with some amendment of the Emigration Act (VII of 1871), a greatly improved state of things will be possible.

The great majority of the emigrants come from the North-West Provinces, Oudh, and Central India, 12,594 of the whole number despatched having been recruited there. Behar comes next, sending 3,412; while Bengal Proper only contributed 925, and of these most were picked up in Calcutta or its neighbourhood. The whole of Eastern Bengal sent only 40 emigrants into the depôts. The classes who emigrate stood thus as to numbers (souls, not statute adults,) :—

	• Brahmins and high castes	2,521
Hindoos	• Agricultural castes	4,974
	• Artizans	1,537
	• Low castes	5,309
Mussulmans		2,910
Christians		8

The successful results of the voyage to Demarara under steam have led the Lieutenant-Governor to propose that no restriction should be placed on full-powered steamers as to the time of year at which they may take emigrants. So far the experiment shows that the voyage may be made by them in half the time taken by sailing vessels and with very little mortality. In some of the voyages by sailing ships this year the mortality was excessive, while it is much feared that one ship which sailed in January has been lost with all hands; but the complete returns for 1872-73 have not yet been received.

The figures for 1871-72 were received after last year's report was published. The following is a statement showing the mortality among coolies in depôt, the average time of detention in depôt, the mortality on the voyage, and the average duration of voyage, during the years from 1869 to 1872.

Statement showing the mortality among coolies in depôt, the average time of detention in depôt, the mortality in the voyage, and the average duration of voyage during the years 1869—1872.

COLONY.	Year.	MORTALITY IN DEPOT.		DETENTION IN DEPOT.			MORTALITY ON THE VOYAGE.		
		Number of deaths.	Percent- age of deaths.	Maximum.	Mini- mum.	Average.	Number of deaths.	Percent- age of deaths.	Average duration of voyage.
Mauritius	1869	5 out of 840 souls	59	59 days*	1 day	3½ days	2 out of 740 souls	26	367 days
	1871	18 " 2,612 "	68	91 "	1 "	25.09 "	22 " 2,564 "	84	40.37 "
	1872	46 " 4,904 "	93	48 "†	1 "	11 "	49 " 4,863 "	1,009	30 "
	1869-70	69 " 6,815 "	1.01	77 "	3 "	28 "	323 " 6,684 "	4.83	88 "
British Guiana	1870-71	3 " 3,634 "	708	80 "	3 "	17 "	57 " 3,235 " (a)	1.76	94 "
	1871-72	8 " 2,406 " (b)	733	100 " (c)	3 "	31 "	68 " 2,139 " (d)	3.17	93 "
	1869-70	35 " 3,283 "	1.06	125 " (e)	1 "	30 "	53 " 2,935 "	1.77	85 "
Trinidad	1870-71	13 " 2,388 "	54	106 " (f)	1 "	20 "	46 " 2,087 "	2.20	92 "
	1871-72	6 " 1,999 "	73	229 " (g)	2 "	25 "	21 " 1,649 " (h)	1.27	90 "
Jamaica	1869-70	5 " 1,161 "	43	53 "	41 "	46.5 "	" " (i)	" (i)	"
	1870-71	7 " 1,550 "	45	51 "	5 "	28 "	23 " 1,582 "	1.66	105 "
	1871-72	5 " 1,687 "	30	85 "	7 "	46 "	79 " 1,279 "	6.17	113 "

* In consequence of suspension of emigration.

† A family consisting of five souls were detained for an exceptionally long period of 144 days, chiefly on account of weakness and debility of a child. This is omitted from calculation of maximum detention.

(a) Inclusive of 23 births.
 (b) Exclusive of infants.
 (c) On account of sickness or debility.
 (d) Including 14 births.
 (e) On account of sickness.
 (f) On account of sickness.
 (g) Do.
 (h) Including 9 births.
 (i) Figures not available.

The mortality on some vessels was extremely unsatisfactory. It was generally attributed to delay, heat, and bad weather in the Bay of Bengal, facts which certainly indicate the superior advantages of steam.

From Mauritius, Demarara, and Jamaica, 3,314 emigrants returned to India. Their condition was satisfactory, and the only mortality was among return invalids. No complete statement of their savings was procurable. The coolies are very reticent on this point, but it is noted that 74 return emigrants from Mauritius remitted Rs. 42,774 between them, and Rs. 2,16,106 were brought home by 551 labourers from Demarara, Rs. 14,583 of it belonging to one man.

The most important result of the action taken by this Government in connection with colonial emigration during 1871-72 was, as above noted, the adoption by nearly all the colonies of a minimum rate of wages guaranteed by law. At present this has been fixed in British Guiana, Trinidad, and Grenada at 25 cents, or 1 shilling and a half-penny per diem. A draft ordinance framed on the report of the Royal Commission of Enquiry is under consideration in British Guiana, which is intended to bring together, consolidate, and amend all the labour laws of that colony, and which the Secretary of State desires to see adopted by all the West Indian Colonies and by Mauritius. By this the minimum daily wage is fixed at 24 cents or 1 shilling—the rate in force in Jamaica, and the engagements made with the coolies in this country, will have binding force in the colonies. Under the ordinance as at first framed, the employer was bound to provide work every day, save Sundays and holidays, but the labourer was only bound to work five days a week. The Secretary of State has since agreed to raise the number of working days to six per week. The minimum rate of wages for females and indentured minors is 16 cents. Rations are to be provided for new arrivals at 4 pence a day, while the rations for minors are gratis. The powers and duties of the Emigration Agent are defined, and all the medical officers made servants of Government and liable to removal. The Emigration Agent at places abroad is to have “such salary or other remuneration as may be granted him by Her Majesty.” The Secretary of State has induced all the colonies to adopt the system of fixed salaries. The ships are to be inspected carefully on arrival in the colony, and breaches of the charter party brought to notice. Provision is made for the indenture and schooling of minors. The position of immigrants after completion of indenture is set out, and annual contracts of service provided for as well as ordinary monthly engagements of free immigrants. No employer will be able to mulct his labourer’s pay. The stipendiary magistrates will settle all such matters. Hospital and house accommodation is carefully secured. Return passages are secured free after ten years for all Indian immigrants and their families, and for disabled immigrants at any time.

On the whole this ordinance may be expected to improve materially the position of the Indian emigrant in all colonies where it is adopted. The Lieutenant-Governor has submitted his views upon some points, in which it seemed that the details of the Bill might be amended; but His Honor is disposed to think that no colony which refuses to adopt it, or something like it, and to guarantee a minimum rate of wages equal to that proposed, ought to be allowed to draw labour from India. The Dutch colony of Surinam, which has, as already noted, commenced to indent upon the Indian labour market, has pledged itself to give terms equivalent to those adopted for British Guiana. But as regards both English and foreign colonies, what is now most essential is that the Indian Government should have full and regular information as to the condition and treatment of the labourers. How defective our information has hitherto been, was shown in last year's report. His Honor has proposed, in connection with a proposed amendment of the Indian Emigration Act, that the continuance of emigration to any colony or territory should be subject to its recognizing and complying with the requirements of Indian law as regards the labourers and the punctual reception of full annual reports of their condition.

The amendment of Act VII of 1871, to which allusion has just been made, is the necessary complement of the colonial legislation above referred to. It will serve to bring under control the whole machinery connected with the procuring of emigrants in this country. Sub-agents, who are at present not recognized, will be licensed as the recruiters now are. Both sub-agents and recruiters, and mofussil depôts, will be brought under proper surveillance, and the District Magistrates will have to be satisfied as to character before allowing any sub-agent or recruiter to work in his jurisdiction. The Lieutenant-Governor has proposed to limit the season for the departure of sailing vessels, so as to secure their avoiding the monsoon; but, as already noticed, he would allow full-power steamers to go at any season. Amendments in other and minor points have also been suggested, which need not here be recapitulated.

Outside all this constant care has been taken to see as far as possible that intending emigrants are instructed as to their prospects and probable wages; and that the facts are to some extent understood may perhaps be inferred from the circumstance already noted that St. Vincent, which guarantees no minimum wage, and actually pays only seven annas a day or less on an average, was unable last season to obtain any labour from this Presidency.

Since the close of the year emigration to the island of Nevis has been authorized, that colony having adopted the British Guiana rates and regulations. Emigration to Natal, which had been suspended in 1872 owing to complaints received of the treatment of the coolies in that colony, has been resumed provisionally,—a law having been passed by the local legislature establishing a protectorship of immigrants, and giving power

Emigration to Nevis and Natal.

to redress the grievances of the labourers in several important points. It is intended, however, that the Guiana ordinance should be adopted by this colony also.

Various other minor matters in connection with emigration have

Revised rules.

been dealt with during the year. A revised set of rules under the Act have been drawn up by this Government and approved by the Government of India for general use. Attention has been drawn to the necessity of making provision for disabled return emigrants, and arrangements made for the reception of return emigrants from colonies that have no separate depôt. The office establishment of the Protector has also been revised and strengthened.

Detailed information is given in the following statement regarding

EMIGRATION TO THE TEA DISTRICTS.

Return of labourers employed in the tea districts under contract in 1872.

imported labourers in Assam, Cachar, and Sylhet during the year 1872. The total number of labourers remaining employed under contract at the end of the year was 44,554, against 39,904 at the end of 1871.

General Return of Imported Laborers employed in the Tea Districts under contract during the year 1872.

Division of province or district.	Number of labourers remaining at the end of 1871.	Imported during 1872.	Received from other districts.	Returned from desertion.	Returned from imprisonment.	Re-engaged in the province.	Total.	Transferred to other estates or factories.	Released by permanent unfitness.	Released by completion of service.	Released by purchase.	Released by engagement.	Number of deaths during the year.	Deserted.	Imprisoned.	Total.	Total number of labourers remaining at the end of 1872.
Upper Assam	17,404	5,280	98	53	64	822	30,720	98	46	8,622	11	228	818	529	69	10,423	20,297
Nowgong	655	186	.....	2	4	210	1,057	.....	1	339	.....	2	29	13	1	355	673
Durrung (Chardooar)	1,176	257	14	.....	6	231	1,654	.....	2	507	3	3	41	6	8	570	1,114
Mungledye	537	14	.....	.....	8	185	744	.....	.....	209	.....	.....	20	2	8	259	505
Bishnath (Scoteah)	990	193	.....	.....	.....	881	2,064	.....	20	849	.....	.....	37	18	1	925	1,139
Kamroop	.....	13	.....	.....	.....	423	436	.....	.....	154	.....	.....	6	1	.....	161	275
Oachar	18,664	3,698	1,042	6	74	11,340	34,924	377	44	12,553	243	301	546	667	73	14,904	20,020
Sylhet	478	84	19	.....	4	275	890	19	1	238	1	.....	7	7	.....	328	532
Total	30,904	9,725	1,173	60	160	21,367	72,389	494	116	23,526	258	534	1,504	1,243	160	27,335	44,554

The total figures for Assam only are as follow :—

NUMBER OF LABOURERS ... {	On the gardens on 1st January ...	20,850
	Imported during the year ...	5,943
	Engaged or re-engaged locally during the year ...	9,752
	Completed or cancelled their agreement ...	10,913
	Deserted... ..	569
	Imprisoned	87
	Died	951
	Percentage of deaths on average { 1872 4.12	
	strength { 1871 4.26	
	Number of labourers on the gardens on the 31st December ...	24,002
	Number of gardens at work with contract labour on 31st December 1872	195

There has been a very considerable extension of tea industry in Assam during the year under review.

Seventeen new gardens appear for the first time on the returns, while only three gardens were closed.

The death-rate on the average strength of labourers in Assam was 4.12 per cent., or .14 per cent. below the average of the preceding year. The death-rates among contract labourers in the several tea-producing provinces compare as follows :—

	1870.	1871.	1872.
Assam ... 5	per cent.	4.26 per cent.	4.12 per cent.
Cachar ... 2.22	"	2.11 "	2.8 "
Sylhet ... 4.23	"	1.07 "	1.38 "

This shows that Assam is still in this respect far behind the other provinces, and that there is very great room for improvement. The death-rate was highest in the gardens of Durrung and North Lukhimpore, and in the small jungly gardens near the frontier. In the gardens of Kamroop and Durrung, and in many Seebaugor gardens, the death-rate was satisfactorily low; but among the newly-imported coolies there was a great deal of mortality. Cholera, too, prevailed during the year—more so, say some of the planters, than has been known for many years.

From the inspection reports it would seem that the labourers are generally well-looked after, and that most of the extraordinary mortality which was not caused by the cholera epidemic took place on new gardens or among newly-arrived coolies, who are always most susceptible of disease.

Statements have been made that weakly coolies are substituted sometimes for those who have passed the medical examination, and that gardens lose in this way. Inquiry is being made into this.

The Commissioner and the majority of the inspecting officers report that the labourers are, as a rule, contented and well off. The remarks on the inspection reports of each garden seem to bear out this view. But at the same time the Lieutenant-Governor cannot but feel that there are some grave drawbacks when the mortality is still so very high upon some gardens, and exceptional cases have come to light in which things have not gone so well as in most gardens.

In Cachar—

- 114 tea gardens were at work on the 1st January 1872;
1 tea garden closed work during the year;
3 new gardens were opened and worked during the year;
117 tea gardens were at work on the 31st December 1872.

Mean number of contract labourers at work during the year ...	19,875
" " of adult " " " 	18,405
of children over seven years	1,470
of infants under seven years and not reckoned as labourers	2,268
Percentage of mortality among adult labourers	2·8
" " " child	1·9
infant non-labourers	7·81
Number of deserters during the year who were not apprehended	667
" of labourers who completed their contract during the year	12,558
" " imported during the year	3,698
" " engaged in the district during the year ...	11,340

In only a very few gardens was the mortality in any way excessive. On the whole the inspection reports bear out the view which the Lieutenant-Governor expressed in 1871, that the coolies on Cachar tea gardens are in the main contented, healthy, and well cared for.

There is some doubt thrown on all the percentages by the fact that some gardens do not make returns for time-expired and local coolies. The census of January 1872 showed that 40,000 people were resident on the Cachar tea gardens, though the labour returns for the same month showed only 20,622 labourers and infants. The coolies remaining at Cachar at the end of the year 1872, as stated to have belonged to the several emigrant tracts, number as follow :—

Labourers classed as Bengalis	...	...	...	...	...	10,189
Chota Nagpore labourers	...	...	...	...	...	3,411
North-West Provinces' labourers	...	...	...	...	...	5,806
Nepal labourers	...	...	...	...	...	18
Madras ditto	...	...	...	...	...	263

Probably, however, most of the people classed as Bengalis are not real Bengalis, as the term is used generically in the tea districts, and most of these people are, it is believed, of aboriginal tribes—Dhangars, &c., recruited on the western borders of Bengal.

Steps are being taken to prevent the multiplication of liquor-shops near the coolie lines, as complaints have been made of the spread of drunkenness among the labourers.

From Sylhet the reports are very satisfactory. Including branch gardens there are five gardens in the district, giving an average of 505 coolies for the year under notice. They speak well for the management of the gardens and the health of the coolies. There were no complaints about wages or work.

The figures as contrasted with previous years are as follows :—

	1870.	1871.	1872.
Average number of labourers	590	560	505
Deaths during the year ...	25	6	7
Labourers imprisoned ...	1	4	...
„ who deserted ...	54	22	7
„ imported	65	116	84
„ engaged or re-engaged in			
Sylhet	333	344	275

During the year the amendment of the Act (II B.C. of 1870) regulating the transport of labourers to Assam, Cachar, and Sylhet, has closely engaged the attention of the Lieutenant-Governor and the Bengal Legislative Council. The amending Bill (Labour Districts Emigration Act) effects a change as to which *all* parties are quite agreed, and which is of very great importance, inasmuch as it will remove wholly from the operations of the Bill at least two-thirds of the persons now subject to it, viz. the time-expired labourers. These people, who are now in a state of quasi-bondage (inasmuch as every new contract of whatever duration and of whatever character, verbal and written, without registry or other precaution, restores them to all the rigors of the Act), will become free men and free women. There were several other amendments of the Act which a thoroughly practical experience in its actual working had shown to be required. It was originally the desire of this Government to make these amendments only. The Special Member of Council in charge of the business found, however, that the Act might be greatly systematized and improved by redrafting, and he accordingly redrafted the previous Act as well as amended it. Unfortunately, however, he carried his enthusiasm for improvements in language so far that the old Act was very much disguised by making verbal changes, which were probably not indispensable. Great attention has been since given to the Bill by a highly competent committee with the Advocate-General at its head. The substantial improvements and more systematic arrangement have been retained, while unnecessary changes in the previous wording have been avoided. The Lieutenant-Governor thinks there cannot be a doubt that the Bill as it now stands is a great improvement on the previous Act, and that the improvements effected with so much care and labour should not be lost.

• One very important question which has arisen in connection with the Bill is whether free recruiting shall be permitted to certain of the tea districts. The Lieutenant-Governor found that one of the best gardens in Cachar, where the coolies are perfectly happy and content, was to a large extent worked by labourers who had been in fact illegally recruited, that is to say, they had been induced to go there by sirdars without being taken before a Magistrate or registered under the Act. The matter came before him in the shape of a proposal to punish criminally a sirdar who had so recruited. It appeared to His Honor that if coolies could be procured for tea gardens in this way, and were well treated and happy there, there was no reason why a penal law

should be put in force. If these coolies had not the protection of the Act, neither were they bound by its provisions as to contract.

In Cachar and Sylhet the system of free recruiting would, the Lieutenant-Governor is inclined to think, work unobjectionably, and opinions have been sought for as to whether it is better that the districts in question should be removed from the operation of the Bill altogether and left untrammelled and unfettered, like any other district of these provinces, or whether they should be retained in the Bill.

All parties must see that a one-sided settlement, *i.e.* one freeing planters from all restrictions in recruiting, and at the same time subjecting the cooly to special penal laws to enforce the contracts into which they may enter without any special precautions, is quite out of the question. Planters must choose whether they will have freedom of contract for themselves with the protection of the ordinary law of the country only, or the present system of examination, registration, and special precautions in regard to contracts, followed by a special penal law to make the cooly work out his contract, as provided by

SECTION 492.

Whoever being bound by lawful contract in writing to work for another person as an artificer, workman, or labourer, for a period not more than three years at any place within British India to which, by virtue of the contract, he has been or is to be conveyed at the expense of such other, voluntarily deserts the service of that other during the continuance of his contract, or without reasonable cause refuses to perform the service which he has contracted to perform, such service being reasonable and proper service, shall be punished with imprisonment of either description for a term not exceeding one month, or with fine not exceeding double the amount of such expense, or with both, unless the employer has ill-treated him or neglected to perform the contract on his part.

the Bill. In the former case, *i.e.* if they come under the ordinary law, planters may enforce their contracts— (1) by an ordinary suit, and (2) by the penal provision of Section 492 of the India Penal Code (Act No. XLV of 1860), quoted on the margin.

Another question on which the Lieutenant-Governor has asked for opinions is to an amendment which would allow a system of free emigration to go on side by side with the system prescribed by the Bill. The penalty on recruiting otherwise than under the Bill would be altogether removed, but it would be provided that no contract to labour in the labour districts otherwise than under the Act should be binding on an emigrant; but if he goes without any binding contract, when he reaches the labour district he may then enter into any contract he chooses, like any other local labourer, under the ordinary law of contract. The question then is whether in those districts which remain under the Bill it is desirable to allow this free system or any other free system side by side with the system under the Act.

Another amendment proposes to repeal the present power of planters themselves to seize runaway coolies. Without prejudging this question, His Honor has said that he would like much to learn what officers, planters, and the coolies themselves, say about it. The effect

Free emigration alongside present system in Assam.

Proposal as to runaway coolies

of the amendment would be, that instead of seizing his cooly the master must prosecute him for desertion in the criminal court. The question is whether the time has come when so great an interference with the liberty of the subject as this power of the master to seize can be dispensed with. His Honor is inquiring, both from the planter's and from the cooly's point of view, whether the power is liable to abuse; and whether, if not unduly used to restrain a fair freedom of action, the object would not be sufficiently gained by making it the duty of the Magistrate to seize and punish any deserter who may be pointed out to him.

The above are the more important matters under discussion in connection with the Bill, and the Lieutenant-Governor hopes that they may be settled and the Bill passed before Assam is separated from Bengal.

The question of establishing a system of emigration to British
Emigration to British Burmah. Burmah is under the consideration of
the Imperial legislature, and it will
probably be found that the discussion upon that Bill and upon the Bill
above described will together tend to place the whole subject of labour
transport on a satisfactory footing.

CHAPTER XXV.

SANITATION.

THE Government of Bengal has never been able to effect much in the way of sanitation in the interior of these populous provinces. We are still much hampered by our ignorance of the statistics of mortality and of the conditions of health and disease in this country, although, as is shown in this report, we have done something towards improvement in this respect. We have no machinery wherewith to improve the sanitary state of the country. A supply of good water everywhere

General remarks.

is no doubt more than anything the one thing needful, and this we are at present powerless to furnish except in a few municipalities, the landholders being unwilling to aid, and communal machinery being wanting. All the hospital, jail, and other statistics, show that in Bengal generally the most fatal form of disease is not fever, but dysentery, diarrhoea, and other bowel diseases, which may well be connected with the water-supply. The Government has devoted considerable attention to the condition and deplorable mortality of the fever-stricken districts in the Burdwan division. The want of pure water is there most especially felt. Still, as yet, in the reeking swamps of lower Hooghly and part of Midnapore there has been much less fever than in the higher parts of Burdwan and Hooghly, where there is a sensible natural drainage. Colonel Haig, in his note on the Burdwan fever, gives a striking and almost horrible description of this low-lying tract, where there is no healthy flow of water whatever, and no escape,—where the water stagnates and a mass of decaying vegetation stagnates in it; and yet not only is the fever less in these swamps, but the human race has multiplied therein to a greater extent than anywhere in India—perhaps in the world. It seems as if it may almost be said that we cannot have too much water in Bengal, and that in such conditions in this climate, all sanitary science notwithstanding, the human race will multiply till it is wasted by great calamities. During the year a complete survey has been made by the officers of Colonel Haig's Irrigation Department of the most water-logged and unhealthy tracts of the Hooghly district in order to put us in possession of the physical facts, and furnish some guide towards great plans of drainage, reclamation, and sanitation.

On the other hand, it may be said that some of the Municipalities have done much towards improving the sanitary condition of the people. The

Municipal sanitation.

The water-works and drainage works of Calcutta appear to be a great success, for which much is due to the skill and energy of the late engineer of Calcutta, Mr. Clark. During 1872 the main drainage scheme was extended to the northern division of the town, and measures were taken for increasing the daily water-supply of the town by 3,000,000 gallons. To the Municipality of Burdwan the Government has given a donation of Rs. 15,000 and a loan of Rs. 40,000 towards the canalisation of the river and the establishment of water-works, from which much is expected. In the town of Dacca a most munificent gift of Rs. 1,50,000 has been made to the Municipality by the well-known Khajeh Abdool Ghunny, C.S.I., and his son Khajeh Ahsanoollah, with the object of providing the people of Dacca with a supply of pure water. Conservancy works are commenced, and will now, we hope, be rapidly pushed on in Dacca, and already something has been done to relieve the city from the charge of an unhealthiness and special liability to cholera, under which it has long laboured. In the Municipalities of Bengal conservancy and sanitation are well looked to, and our progress is steady.

It is not necessary to enter in any detail into the working of the Contagious Diseases' Act in Calcutta during the past year, as so much has been given in former reports, and no

Working of the Indian Contagious Diseases' Act.

change has been made in the system during the year of review. The Act is now working quietly and without any apparent friction, and has, in the opinion of those charged with its administration, had a marked effect upon the health, not only of the European soldiery, but of the civil population that come into hospital for this class of disease. The admissions to civil hospitals and dispensaries from venereal disease were 6,529 in 1872 against 7,305 in 1871, showing continued improvement. The number of women on the register at the close of the year was 6,871, as against 7,087 at its beginning, showing a decrease of 216.

The total cost of the Lock Hospital, preventive and other charges, was Rs. 56,805, and of this sum the Municipality of Calcutta paid Rs. 12,915.

The reports for the year in regard to the Cantonment Lock Hospitals in the interior continue on the whole favorable to the working of the system. Whilst 646 soldiers were treated for venereal diseases in 1871, only 302 were admitted to hospital for such diseases in 1872. The particulars regarding each of the Lock Hospitals in Dinapore, Barrackpore, Dum-Dum, Hazareebaugh, and Darjeeling, are annually reviewed by the Sanitary Commissioner with the Government of India, and need not be here set out in detail.

The Pooree Lodging-house Act, Act IV (B.C.) of 1871, for the benefit of the pilgrims to Juggernath, was very successfully worked during the year under the immediate supervision of the Health Officer. This Act is

Sanitary arrangements at Pooree, and the working of the Lodging-houses' Act during 1872-73.

designed to bring under control the sanitary arrangements of that

town, which is crowded with pilgrims at certain seasons, and has only too often been a focus of epidemic disease. The lodging-houses are now registered and inspected, and none are licensed save for a limited number of inmates, and after proper provision is made for conservancy. There were 342 lodging-houses registered, and licenses were taken out

	Rs.	A.	P.
* Certificate fees ...	344	0	0
License " ...	4,042	12	0
Fines ...	514	15	0
Miscellaneous receipts...	73	6	5
Total ...	4,975	1	5

for 6,085 lodgers. The money receipts for the year were Rs. 4,975-1-5.* The total disbursements were Rs. 3,678-3-6, leaving a net balance of Rs. 1,296-13-11, which, if added to the amount already at the credit of the fund, gives an aggregate of Rs. 7,703-5-4, and this amount is to accumulate towards carrying out a comprehensive

system of drainage in the town of Pooree. Considerable improvements have recently been made in the town and management of the lodging houses. The Health Officer's report shows that no cholera *generated* in Pooree this year. Cholera was, however, brought into Pooree by some pilgrims from Nilgiri, a tributary estate in Orissa. This epidemic caused 63 deaths. The water-supply of Pooree is somewhat unexpectedly declared to be ample and of good quality, tests applied by Dr. Nicholson, Analyst of Water, proving it to be better than the average of most large towns.

It has been customary under the head of sanitation to deal with the principal diseases of an epidemic or peculiar character which afflict the country, and to notice anything that has been done or designed to avert or mitigate them. The following remarks pertain to this branch of the subject.

The diseases which prevailed epidemically in the province during the past year were cholera, fever, dengue fever, and small-pox.

Prevalence of disease.

Cholera prevailed to a greater or less extent in every part of the province, and throughout most of the year.

Nowhere, however, did the disease assume very large dimensions, or demand special relief measures on an extensive scale. The deputation of a Native Doctor to affected localities, and the distribution of cholera pills, were the means usually adopted when an outbreak of exceptional severity was reported.

Burdwan suffered severely, the disease occurring sporadically in the villages in every month of the year.

Burdwan.

Most cases occurred in June, July, August, and September; in the other districts the disease was more sporadic and limited. In Midnapore, Bancoorah, and Burdwan, the appearance of the disease was observed to be coincident with the arrival of pilgrims from Orissa.

Cases of cholera occurred in Calcutta in every month of the year, and the total number exceeded that of the two preceding years.

Presidency.

November and December were the worst months. In 24-Pergunnahs the disease was sporadic throughout the year. Most cases occurred in the first four and last two months. Severe outbreaks occurred at

Diamond Harbour, Barripore, and Barrackpore, towards the close of the year. In Nuddea the disease was very prevalent, though not concentrated, during the first five months of the year. Jessore suffered most in the first four months, and in December.

In Moorshedabad and Dinagepore and Rajshahye the disease prevailed rather extensively during the first four months of the year, and there was very little during the remaining months, except in Dinagepore, where an increase was manifest in November and December. In Maldah and Bograh cases were few and sporadic. Pubna suffered more severely in the first five and last months. In Rungpore there was a severe outbreak from September onwards in the western thannahs of the district.

A good deal of cholera prevailed epidemically in the Darjeeling district in April, May, June, July, and August. It was thought to have

Cooch Behar.

been imported by the Nepaulese coolies returning from the Lushai expedition. The disease became epidemic in Julpigoree in December.

Cases occurred in the Dacca district throughout the year; in December the disease was most prevalent. A considerable number of

Dacca.

cases occurred in Furrecdpore in January, but comparatively few during the rest of the year. Backergunge fared worse, the disease appearing in the hot weather, subsiding during the rains, and again appearing as the cold weather advanced. The Civil Surgeon notes that the hot-weather cholera proceeds from the south northwards, and the cold-weather cholera from the north southwards. In Mymensing cholera was scattered and rare till December, when several sharp outbreaks occurred. In Sylhet and Cachar the disease was severe in March, April, and May. The troops and coolies returning from the Lushai expedition suffered much in passing through these districts.

Cases occurred in Chittagong throughout the year,—a larger number in the first five and last months of the year than in the rains.

Chittagong.

In Noakhally no cases were observed in July, August, and September, and this was also noticed in 1871. December was the worst month. The features of the disease were very similar in Tipperah.

The disease was severe in these districts during the months of May, June, and August; Patna and Gya suffered most. The dry months

Patna.

were comparatively exempt. In Shahabad a similar history obtained, but to a less extent. In Sarun, August and September were the worst months. Tirhoot and Chumparun were similarly visited, but the outbreaks in the former were more severe. In the dry months of the year the Behar districts did not suffer much.

In Monghyr and Bhaugulpore the disease prevailed to a considerable extent in the rainy months, more severely in the former than the

Bhaugulpore.

latter. In Purneah, November was the worst month, but in none could the disease be pronounced more than sporadic. The Sonthal Pergunnahs had sporadic cases in the hot weather.

The disease was very prevalent in the districts of Orissa in March, April, May, June, and July. The earlier and later months were comparatively exempt.

Orissa.

The districts of this division suffered very little. The disease prevailed to a greater extent in Maunbhoom than in the other little districts, and the bulk of cases occurred in May, June, and July. It occurred mostly along the principal lines of traffic. A few sporadic cases occurred in Hazarcebaugh, Ranchec, and Singbhoom throughout the year.

Chota Nagpore.

All the districts suffered more or less. July, August, November, and December, were the worst months in Goalparah, but small epidemics were reported throughout the year. A good deal of cholera occurred in Kamroop, most in January, February, May, June, and July. In Durrung cases occurred throughout the year; June and December were the worst months. In Nowgong a good deal of cholera occurred in January and June. A severe outbreak took place in Sebsaugor in October, November, and December. This district appears to have suffered more than any other in the whole province. In Lukhimpore the disease was confined to the North Lukhimpore sub-division. It was imported from Jorehaut, and prevailed in some villages in November and December; the hill districts were exempt from the disease. Cholera broke out in many of the steamers conveying coolies to Assam in the hot weather.

Assam.

The most remarkable features in the history of cholera in 1872 were,—its wide distribution throughout the province; the Chota Nagpore districts, Sonthal Pergunnahs, and hill districts suffering least; the severe prevalence of the disease in Orissa and Assam; its association with the Pooree pilgrimages and Lushai expedition; the comparative immunity of the districts of Eastern and Southern Bengal during the months of rain and flood, and its prevalence in the dry months (the features of the disease in Behar being exactly and remarkably reversed); the number of outbreaks in steamers conveying coolies to Assam; and the unusually severe prevalence of the disease in the Darjeeling and Julpigoree district.

Fever of a very severe and fatal type prevailed, as it has for some years past, extensively in all districts of the Burdwan division except Bancoorah.

EPIDEMIC FEVER.

In the district of Burdwan the disease was more universally distributed, and caused greater mortality and sickness than in any of the remaining districts. In Beerbhoom the low alluvial part of the district in the neighbourhood of the Adjye river lying to the south and south-west, and bordering on Burdwan, suffered much. In Midnapore the affected tract consisted of the flat alluvial country lying between the Selye and Cossye rivers to the north-west of the district, and marching with the south-eastern thannahs of Hooghly. In Hooghly, however, the disease was more severe and fatal to the north and west of the district than to the east and south. In previous reports the rise and progress of this alarming and disastrous epidemic have been chronicled. It began to rage about ten

years ago in Jessore and Nuddea, and caused much consternation and havoc in several parts of these districts. It gradually spread to the northern parts of 24-Pergunnahs, and in 1864-65 crossed the Hooghly and appeared in the northern portion of the Hooghly district. In 1866 it appeared in the eastern and southern parts of the Burdwan district. During 1867-68 it continued to prevail and spread in these districts along the course of the Damoodah river, and in 1869 the town of Burdwan was attacked, and many places in both districts suffered severely. In 1870 the type and mortality were not so severe; but in 1871 fever broke out with renewed virulence, and was more widespread and fatal than ever. It also extended to those parts of Beerbhoom and Midnapore bordering on the Burdwan and Hooghly districts. The disease commenced in July and continued to cause most serious sickness and mortality throughout the whole of the cold season of 1871-72. The year 1871 closed with the epidemic in full sway throughout almost the whole of the portions of Beerbhoom and Midnapore already indicated. A short sketch is here given of the distribution and features of the disease in each of these districts during the year 1872, and of the measures adopted to relieve the sufferers.

At the close of the year 1871 twenty-five special dispensaries were in operation, distributed in three circles, to each of which an inspecting medical officer had been appointed for the purpose of directing and supervising relief measures and reporting on the circumstances of the prevailing epidemic.

Burdwan.

The northern, middle, and southern parts of Burdwan, were most affected, especially the southern part on each side of the river Damoodah, and between that and the Dulkessur; while the eastern and north-western sections of the district were comparatively healthy. One Assistant Surgeon, five Sub-Assistant Surgeons, and twenty-four Native Doctors, had been sent to afford medical relief to the fever-stricken, and a dépôt of medical stores had been opened at Burdwan. Food and blankets had also been distributed to some extent, for the people who had been prostrated by the disease had become impoverished, and it was thought that the cold of the winter nights either aggravated the attack or induced relapses.

As the weather became warmer, the fever subsided somewhat; new cases were not so numerous. But the sequelæ of the past season kept the dispensaries open, and the medical officers at work. There was a marked aggravation of the disease in April, attributed to showery weather and sudden changes in the temperature. Towards the end of June aggravations and fresh outbreaks were reported from the northern and southern parts of the district. The Jehanabad thannah had been included in the Burdwan district, and the reports from this quarter indicated severe and widespread sickness. The disease abated somewhat in July, but in August and September it began to increase around Burdwan and in many parts of the district which had been affected in the previous season. During the month of October the reports indicated an abatement, and the health of the district was said to contrast favorably with the corresponding season of 1871. Heavy rain fell from the 23rd to the 26th of October, and this was followed

early in November by a general aggravation of the severity and virulence of the disease. Bad forms of remittent fever were now observed, and severe affections of the spleen and chest became more common. Head complications were also frequent. The parts of the district mainly involved were those already indicated; the eastern and north-western portions still remaining comparatively free. During the fortnight ending 7th November there was an increase of 2,455 in the average daily attendance, which in the week ending 14th November amounted to 8,611 cases. During December acute sickness abated; but dysentery, chronic fever, spleen, dropsy, and cancrum oris—sequelæ of acute fever—were very prevalent.

Four Assistant Surgeons, sixteen Sub-Assistant Surgeons, and seventy-three Native Doctors, were deputed to Burdwan during the year

Remedial measures in Burdwan.

in addition to those at work at its commencement. Eighty new dispensaries were opened, making a total of 105, which were in operation in different localities throughout the year. Dispensaries were, however, closed and opened according to the circumstances and requirements of different localities. The largest number opened at one time was 56 in December. The number of cases treated amounted to 1,275,035. Dépôts for the distribution of food and clothing were opened throughout the district; 33 of these were organised, and 105,748 persons received relief from them, the total amount of money expended in this way being Rs. 5,630. Advances were made from the treasury on account of food and clothing to the amount of Rs. 22,049.

No unusual outbreak of disease occurred in this district, and no relief measures were required. The

Bancoorah.

Civil Surgeon reported that fever was severe in pergunnah Bishenpore in November. He visited the locality and found only the usual autumnal fever and its sequelæ. According to the Civil Surgeon of Burdwan the inhabitants of that part of the Bancoorah district which was during the year attached to the Burdwan district suffered severely from the prevailing fever.

This district has a reputation for comparative salubrity. The unusual prevalence of fever first attracted

Beerbhoom.

notice in 1870, when it was reported to be more than ordinarily severe in the south-east of the district bordering on Burdwan. This is a densely populated alluvial tract situated between the rivers More and Adje. Sickness subsided as the hot weather approached, and from April to September 1871 the district was healthy. In October fever again broke out in the same tract of country, and appeared also in villages further to the north-west. It subsided in March 1872. In July 1872 the disease again broke out in the old ground, and invaded new localities to the north and west. The mortality on the whole was very great. It is observed by the Magistrate that the low flesh-eating castes, who in previous years had escaped the epidemic, were this year carried off in numbers. Seventeen dispensaries were opened before the close of the year, and 16,301 cases treated in them. Appropriate medicines were distributed through the agency of the police and intelligent natives. Two food dépôts were opened in the district.

In 1869 fever resembling the Burdwan fever prevailed in Chunderkonah and Ghattal, which then belonged to the Hooghly district.

In 1870 an unusually severe outbreak of the usual autumnal fever prevailed in and around Tumlook and Gurbetta. In 1871 fever of a fatal type broke out at Nowadah and Daspore, having apparently spread from Jehanabad *via* Ghattal. It was recognised to be the same severe type of disease which was devastating Hooghly and Burdwan. The disease again broke out in December 1872, prevailing severely in thannahs Chunderkonah, Ghattal, Debra, and Daspore, a low alluvial tract lying between the Selye and Cossye rivers, and causing great mortality. Six Native Doctors were deputed to treat the sick, and 24,007 cases were treated by them.

Fever of the exceptionally severe type above described has prevailed in this district annually since the year 1864. During the cold

season, 1871-72, the disease prevailed severely in several parts of the district, more particularly to the west. It subsided as the warm weather advanced, and again broke out in July. The localities mainly affected were Bansberia, Khanacool, Dhuniakhally. Seven special dispensaries were opened, in which were treated 62,289 cases. An epidemic of remittent fever causing much mortality prevailed in many parts of the Serampore sub-division from July 1872 to January 1873.

Since the close of the year 1872 fever has gradually abated in the districts of the Burdwan division, and the special dispensaries which had been established for the relief of the sick were closed in Hooghly, as the weather

Abatement of fever during the spring and summer of 1873.—Increase in the autumn.

became warmer, and greatly reduced in number in Burdwan and Beerbhoom. Much sickness of a chronic nature, consequent on the acute fever of the preceding season, remained, and the dispensaries which were not closed had abundant applicants for relief. There was a slight aggravation of fever in Burdwan as the rains set in, but no real or general increase of sickness occurred until towards the end of September, when from all the districts reports came that the disease was again beginning to manifest itself. The rainfall of 1873 has been very scanty, the total fall having amounted to more than 20 inches less than the average in Burdwan, and the rainy season came to an unusually early close. The increase of fever has been progressive during October and up to the present month (November 1873), and relief measures have been again set on foot in all the affected tracts. But it is still far below what it has been in past years.

In Beerbhoom and Midnapore those portions of the district which were attacked in 1872 have again commenced to suffer. In Burdwan the disease has been observed to be more severe to the south and west, and to have spread beyond the limits of 1872 to the westward. In Hooghly the worst outbreak has been in the neighbourhood of Serampore. Beerbhoom and Midnapore seem to be suffering as severely as in 1872, and more so than in years previous to that. An attempt has been made to utilize the services of "village compounders," a class of practitioners who have gained what knowledge they possess

of disease and its treatment in our dispensaries, for the purpose of treating the sick under strict and systematic supervision. It was hoped thus to provide permanently for groups of villages a Native Doctor competent to treat ordinary diseases, such as ague, dysentery, and diarrhoea, as well as a more skilled subordinate supervising circle of compounders, whose services might be commanded in more difficult or serious cases. The scheme has, however, so far not succeeded well.

Hitherto the severe fever which has been prevailing in these districts of the Presidency and Burdwan divisions during the last ten years has been unanimously considered to be an aggravated form of malarious fever. Several theories have been held as to the cause of the special virulence of its type. Dr. Elliot and the special Commission appointed some years ago were inclined to attribute this to insanitary conditions, filth, overgrown jungle, &c. This idea has been exploded, because the fever has been found to maintain no constant relation to the degree of filth, &c.

The Hon'ble Baboo Degumber Mitter has strenuously maintained that the special virulence is due to obstructed drainage. His data have been called in question by others, and though obstructed drainage cannot be otherwise than pernicious, it is by no means certain that every instance of outbreak of this fever coincides with, or follows the construction of, a road, railway, or embankment. The opposite has indeed been pointed out both by Engineers and Civilians.

Another view attributes the special severity of type of the fever to natural deltaic changes, unequal subsidence or elevation of the Gangetic delta or spontaneous siltings of water-courses. The gradual progress of the disease westward is claimed as a strong evidence in favour of this view. Colonel Haig, in an able note on the causation of the Burdwan and Hooghly fever, endeavoured to prove that the exceptional severity of type was due to over-population and destitution, to a weakened vital stamina or power of resisting disease—causes which are ever rife in these districts. This subject is now under very careful inquiry by a special agency.

More recently still the medical officers serving in Burdwan have been describing cases of typhus and typhoid fever, and some have gone so far as to say that one or other of these fevers constitutes the real epidemic, and that its existence accounts for the exceptional severity of type and mortality. The attention of medical officers has been strongly directed to the importance of very carefully determining the type of the fever. They have been furnished with clinical thermometers, and regular observations are being taken under the supervision of the Surgeon-General. Meteorological observations are also being regularly recorded, but nothing has come out of them yet; except that there appears to be a direct relation between the humidity of the season and amount of rainfall and the amount of fever; though in the height of the rains, and while the land remains partially or wholly

covered with water, fever is comparatively in abeyance. Observations have been made in America, France, Italy, and the Mauritius which go to shew that periodic fevers are due to a microscopic plant of the algæ class. It has not been found possible as yet to verify this hypothesis in India. In order to make satisfactory observations, a highly skilled observer, furnished with suitable appliances, would have to make prolonged experiments under varying circumstances. Attention has hitherto been so strongly concentrated on devising and applying relief measures, that all the medical officers whose services could be obtained have been employed in supervising the work of the subordinate executive. Government has not, however, lost sight of the importance of systematic scientific observations regarding the exact nature and causation of this terrible malady; and if the agents and appliances can be made available, an inquiry will be initiated for the purpose of obtaining more precise knowledge than we have hitherto possessed.

The Lieutenant-Governor has expressed the opinion that whatever the origin or character of the fever, it marches from place to place by some kind of communication and progression. Places which it has invaded and held for years have been gradually abandoned by it and become healthy again, while it advances over other tracts hitherto healthy, marching onwards by a gradual progress. So much at least seems certain.

Fever did not attract special attention in any of the central districts during the past year. The Civil Surgeon of Moorsshedabad distinctly states that the Burdwan fever has not extended to that district. In Maldah and Rungpore the habitual autumnal fever is reported to have presented a severer type than usual. Malarious fever was unusually prevalent and severe in all the districts of Orissa; this was associated with a heavier rainfall than usual. The only district of Eastern Bengal in which a specially bad form of fever prevailed was Backergungo. The Civil Surgeon describes an outbreak of remittent fever, which raged in the district from June to January and affected the prisoners in the Burrisal jail in the former month. The disease was very fatal in consequence of frequently occurring lung complications. In Assam no unusual prevalence or fatality is reported, except from Kamroop, where the seasonal malarious fever is said to have been worse than ordinary. Many cases assumed a remittent form, and proved rapidly fatal.

In Behar, Cooch Behar, and Chota Nagpore, the autumnal fever prevailed as usual, but nowhere except at Purneah did it attract very special notice. The district of Purneah is a notoriously malarious tract, and suffered much from a virulent form of malarious fever in September. Special measures were adopted to relieve the sick.

The very peculiar fever or disease known as dengue commenced to attract notice in Calcutta towards the end of 1871. The disease continued to prevail during the cold weather, and increased rapidly as the hot weather advanced. It continued to rage epidemically during the hot weather and rains, and few escaped its attack. Very few deaths

DENGUE FEVER.
Its wide prevalence.

were caused by it, though the symptoms, violent fever and racking pains, were exceedingly severe during the few days of acute suffering; and the attack was apt to be followed by prolonged debility and rheumatic or neuralgic affections. Cases of relapse were also not unfrequent. The epidemic subsided towards the close of the rains. Cases began to occur in Howrah and Hooghly in December 1871, but the disease did not spread to the suburbs or surrounding district till March and April. All the suburbs of Calcutta were visited, and the epidemic extended all over the district of 24-Pergunnahs. It arrived at different localities at different times, and could always be traced to importation. The outbreak generally lasted for about three months from the date of the first to that of the last case. The epidemic was carried to different parts of the province, and followed the great routes of human intercourse.

It appeared along the East Indian line of railway, and was carried to Eastern Bengal by the Eastern Bengal Railway and the steamers plying to Dacca, Cachar, and Assam. It also spread to Midnapore and Orissa along the Grand Trunk Road. Following the disease along these great routes, we find that it appeared early in the year at Serampore, Hooghly, and Chinsurah, and gradually spread throughout the surrounding district; it broke out in Burdwan in April and invaded the whole district, prevailing most generally and severely in July, August, and September. The reports of the inspecting medical officers of epidemic dispensaries show that few localities escaped, and that the sufferings of dengue were superadded to the more serious sickness caused by the local fever. It appeared in Raneegunge in May and continued to prevail during the two following months. The disease reached Moorshedabad in April, and spread into the district, prevailing from April to September. It was carried across the Ganges to Rajshahye in July, and a limited number of cases occurred, but the disease did not spread into the district. Bhaugulpore was leniently visited in June. In the same month Maldah was attacked, and cases continued to occur till November. The disease was imported into Monghyr from Calcutta about the middle of April, and spread far and wide. It disappeared in August. Jamalpore suffered much during the same period. It broke out in Patna in June and spread to Bankipore, Dinapore, and many parts of the district, lasting till August. In August dengue broke out in Gya, and continued to rage till November. Most of the inhabitants were seized, and the disease visited many parts of the district. It ceased in November: It prevailed in Chuprah from August till December. This district was not much affected. It broke out in Arrah in August, and in Buxar in July.

To the east of Calcutta dengue spread to many parts of Jessore and Nuddea in June and July. It broke out in Dacca in June and continued to prevail till November. Its importation from Calcutta was clearly proved, and many parts of the district suffered. It appeared in Sylhet in August, lasting till October. The only station on the Assam route affected was Goalparah, where a few cases occurred among the European residents in May. Along the south-western route the disease spread to Midnapore, Balasore, Pooree, and Cuttack. It broke out in Midnapore in July, in Balasore in the same month, in Pooree in

September, and in Cuttaek in October. The disease was also conveyed to Chittagong in June, and prevailed there till September.

All the districts not specified in the preceding narrative escaped the disease.

Although small-pox was not epidemic during the year, the disease

SMALL-POX.

was not altogether absent from any district. With a system of inoculation, very general and by no means simultaneous or exhaustive, existing over the greater part of the province, the manifestations of the disease consisted rather of sporadic outbreaks affecting the unprotected and badly protected of a locality, limited at the same time in extent and duration by the general state of protection which the people enjoy. The notes recorded by Civil Surgeons go to show that the people of Bengal have ever among them the seeds of this pestilence. At the same time it is fair to add that in ordinary years the practice of inoculation ensures the immunity of a large majority of the people from attack. The reports of Civil Surgeons also indicate that the results of mortuary registration are very untrustworthy, all kinds of eruptive diseases being entered under the head of small-pox.

Calcutta has remained very free of the disease, and the districts embraced in the Metropolitan circles have also had very little small-pox.

There was no epidemic in Bancoorah, but in Midnapore a severe outbreak occurred which seems to have been "stamped out" through the energetic efforts of the authorities. Jessore, where inoculation prevails unchecked, suffered little; but it was shown that outbreaks in Nuddea were due to inoculation in the border district. In the Rajshahye division no remarkable prevalence of small-pox was observed, and the Orissa division appears also to have enjoyed an immunity from outbreak. In the Dacca division the usual amount of small-pox caused by inoculation seems to have occurred. The city of Dacca remained almost free of the disease during the year. There was a severe outbreak at Dukhinshabazpore in Backergunge, and the disease seems to have been comparatively severe in Mymensing. The reports from the Chittagong division contain nothing remarkable, and in Assam, where inoculation is more unequally and fitfully conducted, there appears to have been in each district an occasional severe outbreak. In the Patna, Cooch Behar, and Bhaugulpore divisions no epidemic prevailed. The disease became rather common in and around Bhaugulpore towards the close of the season. In the Chota Nagpore division there was less small-pox than in previous years, and it is satisfactory that in the two districts, Singbhoom and Maunbhoom, where the greatest success in converting inoculators to vaccination has been attained, there was less of the disease than in Hazareebaugh and Loharduggah where success has been less marked.

CHAPTER XXVI.

MEDICAL RELIEF.

CALCUTTA is, on the whole, by no means badly provided with medical charities. It has three hospitals of the first class: the Medical College Hospital, the General Hospital, and the Native Hospital with its branches. The first of these treats both Europeans and Natives; the second hitherto received only Europeans, but has now opened a native surgical ward; while the last is, as its name implies, principally confined to natives, but receives accident cases and the like without regard to class. Besides the above there is a large Municipal Pauper Hospital or Lazar House; a good hospital at Howrah, just across the river Hooghly, receiving both Europeans and Natives; and five other institutions, all of them most useful on a smaller scale. The total amount paid by Government for medical charities in Calcutta comes annually to nearly Rs. 3,00,000.

The total number of persons treated at these hospitals and dispensaries during the year was 251,039, or 15,366 more than in the previous year. Of these 20,805 were in-patients, and 231,134 received out-door relief.

Of the patients, 64·9 per cent. were men, 16·3 per cent. women, and 18·8 per cent. children. As regards race and caste of patients, it is found that Hindoos avail themselves of such institutions less readily in proportion to their numbers than the other classes of the community.

The death-rate on persons treated in the hospitals was 132 per mille, or the same as last year. Excluding cholera, it was 125 as against 127 in 1871. There has been a great improvement in the mortality in hospital during the last five years. In 1867 the hospital rate was 191, or, excluding cholera, 175. In 1868 it rose to 199, or, excluding cholera, 179, but since then it has steadily fallen to 132, as stated above. Much of this improvement is attributed to the same causes which have rendered Calcutta itself more salubrious than it used to be.

Setting aside the extraordinary epidemic of dengue, which, however, among 2,292 persons treated, caused only seven deaths, the prevalent types of maladies treated in the hospitals were the same as in former years. Of 2,761 deaths, 217 were from cholera, 682 from

dysentery and diarrhoea, making 899 from bowel diseases, while 306 only were from fever. Phthisis caused 301 deaths, dropsy 217, and ulcers 270. Cholera was more prevalent than in 1871, and the rate of mortality among cases treated was high, 484.3 per 1,000. Typhoid fever was also very fatal, 93 deaths among 132 persons treated. Small-pox has for some years past been almost unknown—thanks probably to the operations of the Vaccine Department.

The Medical College Hospital is an institution the state of

Medical College Hospital.

which has never been very satisfactory. It is attached to the great medical school of the Presidency, and has a large and able staff of picked medical men, both European and Native, but owing either to unhealthiness of site or defects in the buildings, its death-rate has always been unsatisfactorily high, especially in surgical cases. A great improvement has taken place in the last ten years, the average mortality among Christian patients having fallen from 95 per mille to 56, and among natives from rates ranging between 255 and 309 to 168. Still the returns are bad enough, and Government has for some time past been anxiously considering how best to improve the building. The idea of abandoning the site was at one time put forward, but the expenditure involved in such a move was more than Government could undertake, and, moreover, the situation of the hospital and college is so convenient for a large portion of the native town, that a change was objectionable on that ground also. Active measures for improving the building have been delayed by the desire of the medical authorities to have an entire reconstruction of the building. As the funds at the disposal of Government would not admit of so large an outlay, an ineffectual appeal was made to the native public and to the corporation of Calcutta to contribute a portion of the required expenditure. The requirements of the college and hospital are, however, steadily increasing, and the Lieutenant-Governor has felt that he has now no option but to do what he can with the money he can make available. He has already contributed to the municipal funds a large sum of money for the express purpose of effecting a thorough drainage of a defined area surrounding this hospital, and this has been carried out, making the site the most thoroughly drained part of Calcutta, and a model of what the eminent Engineer lately in charge of the drainage works would have. An offer already made by Government of a sum of six lakhs of rupees, or £60,000, previously made and refused, has been renewed. The Lieutenant-Governor has determined to take upon himself the responsibility of expending this sum on the existing site, and the College Council has now been asked to aid His Honor with suggestions for improving the present college and hospital buildings. As soon as these are received and considered, a beginning will be made.

The General Hospital is a fine group of buildings to the south of the Calcutta maidan, partly occupied in former years as a hospital for

Presidency General Hospital.

European civil patients, and partly used as a military hospital. It has now been made over entirely to the civil hospital, the military being removed to a neighbouring building, once the seat of the Sudder, and afterwards of the High Court.

The results of treatment in this institution have generally been better than those of the Medical College Hospital; but when it is remembered that a large proportion of those who enter the wards are sailors from the shipping, broken down by exposure to the sun and by dissipation in the bazars, it will not be surprising to find here too a considerable mortality. The Government has done, and is doing, all it can to make the hospital arrangements complete; and under the present able management, the results are probably as good as it is possible to obtain. Some improvement may, however, be effected by the construction of a river-side dispensary near the shipping, to which sailors can be taken for immediate treatment during the heat of the day, being removed to the hospital in the cool of the evening.

Arrangements have also been made for opening a native surgical ward in the hospital compound, and the committee of an endowment formed in memory of the late Mr. Justice Sumbhoonath Pundit have transferred to this ward a portion of the funds at their disposal, hitherto spent on a separate institution.

The average daily number of sick during the year was 182·25, and the death-rate 45·30 per mille, a rate below the average of the six years (1865-71) by 18·16, but exceeding that of 1871 by 8·78. The cause of this falling off is shown to have been mainly due to the greater prevalence of cholera. There were 17 major surgical operations with no deaths.

The Calcutta Nurses' Institution has again done much useful work, and though its balances have fallen somewhat, it has been able to increase its staff to supply the wants of the Presidency General Hospital. After the year closed, however, Government had to make a special grant of Rs. 2,000 to the Committee of Management to enable them to meet their working expenses, and it is hoped that the ladies of the Committee and the friends of the institution have since been able to place its finances on a satisfactory footing.

The Pauper Hospital, or Lazar House of Calcutta, maintains its high death-rate of 277 per mille, or 202 excluding absolute moribunds. Of the 1,518 deaths among the 5,467 persons under treatment, 308 died within twenty-four hours, and 494 more within a week of admission. Most of the cases when they come in are chronic and beyond all medical skill. Half the admissions are cases rejected by the other hospitals and then brought to the Pauper Hospital, and a large proportion of the remainder are picked up by the police in the streets. Everything has been done that can be reasonably expected to reduce the death-rate and increase the chances of these poor creatures, but without much perceptible effect. The opportunities for clinical instruction at the Medical College Hospital having now, owing to the yearly increasing number of pupils, become quite inadequate, measures are being taken for transferring to the Pauper Hospital the vernacular medical classes. This will be noticed more fully in the educational chapter, but is referred to here as having a possible bearing

on the general working of the hospital itself. With an increased staff better results may perhaps be obtained.

The Native Hospital with its various branches is managed by a body of Governors, comprising the leading members of the European and Native community, and is supported by a Government grant, by subscriptions, and by income from invested funds. It has long been situated in a somewhat confined site and inadequate building in a street that may be said to divide the European from the native town. Owing to the indefatigable exertions of Dr. C. Macnamara, the Secretary and Physician, funds have been raised for a fine new building, for which Government has granted an admirable site on the river bank, close to the very thickest quarter of the native town. To this site the patients will be removed whenever the building is completed. Besides the main institution there are three branch dispensaries working under Dr. Macnamara's superintendence, all of which do useful work.

	1871.	1872.
Number of in-door patients	1,441	1,540
“ of out-door “ ...	187,738	159,008
Total ...	189,179	161,148

The death-rate in surgical cases was therefore 260·0 per mille, much worse even than that of the College Hospital; but it is hoped that the removal of the institution to the river-side, and the opening of separate wards for different classes of cases, will soon improve this

At the close of 1871, 160 charitable dispensaries were in existence throughout the province, exclusive of Calcutta hospitals, and temporary dispensaries established for the relief of unusual sickness. Of these 73 came under the class of “main” dispensaries—dispensaries at the headquarters of districts and those under the charge of Sub-Assistant Surgeons; 62 under the head of branch dispensaries, namely, those situated at out-stations and under the charge of Hospital Assistants and Native Doctors; while the remaining 25 were sub-divisional dispensaries under the charge of the medical subordinate attached to the sub-division.

During the year 19 new dispensaries were opened; of these seven come under the term main, 11 are branch dispensaries, and one sub-divisional. Only two dispensaries were closed during the year, namely, the branch dispensary at Kaitparah in the Jessore district, on account of irregularity in the payment of local subscriptions, and the sub-divisional dispensary of Shgotty, in there Gya district, on account of the removal of the sub-divisional headquarters to Jehanabad. There remained in operation at the close of the year 1872, 176 dispensaries (80 main, 71 branch, and 25 sub-divisional), or 16 more than at the close of 1871. This increase of 16 institutions

contrasts favorably with the statistics of the last few years, the number of additional dispensaries established during 1868 having been 7; in 1869, 13; in 1870, 2; and in 1871, 3.

The statistics which follow refer to 165 of these institutions: the returns of six having been included in the report of the medical institutions of Calcutta and its suburbs, and five having, in consequence of their abolition or recent establishment, submitted no returns. Of these 108, or 65 per cent., received in-door patients, the remaining 57 affording only out-door relief. In many, however, the number of in-door patients treated was small.

It is considered of great importance that every dispensary should, if possible, possess some accommodation for in-door patients, because serious cases of injury and severe cases coming from a distance cannot be properly treated otherwise.

The number of patients treated in dispensaries during the year is shown in the statement on the margin, in comparison with the preceding years. As regards both in-door and out-door patients, the figures show an increase on 1871, and represent an amount of relief afforded unequalled in the history of Bengal dispensaries.

Patients treated in dispensaries.

	In-patients treated.	Out-patients treated.	Total.
1867	17,054	318,895	335,949
1868	16,598	346,845	363,443
1869	18,055	367,757	385,812
1870	17,481	384,960	402,441
1871	17,892	405,528	423,420
1872	18,118	439,177	457,295

Were the total number of cases treated in the hospitals of Calcutta and its suburbs, and in the temporary dispensaries of the fever districts, added, the sum total would amount to 2,086,866,* which approximately represents the amount of medical aid rendered during the year under the auspices of Government to the sick poor of the province. This figure gives a percentage of 3.12 to the population of Bengal.

The daily average number of in-door patients under treatment during the year was 865, and the average number of patients attending daily as out-door patients 4,200.

	No.	Patients.
* Calcutta Medical Institutions	11	251,939
Provincial Dispensaries	168	457,295
Endemic Dispensaries, Burdwan	105	1,275,086
Ditto ditto, Beerbhoom	17	18,301
Ditto ditto, Midnapore	6	24,007
Ditto ditto, Hooghly	7	62,289
Total	314	2,086,866

The figures represent not separate individuals, nor yet, on the other hand, every visit of each patient, but all fresh admissions and *re-admissions* are shown, *e.g.*, a man is admitted for fever and cured; he is re-admitted a few weeks later: his case appears twice.

Of the total number treated, 66·45 per cent. were males, 18·51 per cent. females, and 15·04 per cent. children.

As regards race and caste, 15 per cent. of the total number treated were Europeans; 57 Eurasians; 32·91 Mahomedans; 64·46 Hindus, and 1·91 belonged to other castes.

The results of treatment of out-door patients cannot be accurately stated, for a large majority of them do not return to report recovery, and

Results of treatment.

deaths are seldom ascertained. Among in-door patients, however, the issue of cases can be more precisely registered. Of those treated in 1872, 70·05 per cent. were cured, 13·88 otherwise accounted for, and 16·07 died. The death-rates of the previous five years were,—1867, 18·09; 1868, 18·34; 1869, 16·94; 1870, 16·17; and 1871, 15·41. The high mortality is accounted for by the hopeless state of disease and privation in which a large proportion of the patients treated in-door are admitted, many of them moribund cases picked up by the police and brought to the dispensary to die decently. The dispensaries of Orissa, Assam, and Cachar, always show high death-rates, on account of the deplorable state in which the pilgrims and discharged coolies, which form the bulk of their patients, are admitted.

The diseases causing the largest number of admissions among out-door patients were fevers (19·15 per cent. of total treated); spleen diseases (8·33); rheumatic affection (6·27); colic (5·42); diarrhœa (2·63); dysentery (2·42); ulcer (4·69); dyspepsia (4·11); parasitic skin diseases, mostly itch, (3·85); goitre (3·30); other skin diseases (3·24); injuries (2·92); syphilitic affections (2·73); inflammation of the ear (2·63); bronchitis (2·42); and ophthalmia (2·22). Among in-door patients there is a predominance of the severer descriptions of diseases, the most common being injuries (16·54); fevers (13·58); dysentery (11·66); diarrhœa (5·83); ulcer (5·88); spleen diseases (5·25); syphilitic affections (4·76); rheumatic affections (4·05); cholera (2·91), and dropsy (2·84). These figures preserve a wonderful similarity from year to year. Cholera appears to have been more prevalent in 1872 than in 1871, the percentage of cases treated in-door having been 2·91 against 1·46, and out-door 61, against 36. The principal causes of mortality among in-door patients were,—dysentery (29·98 per cent. of total deaths); diarrhœa (13·32); cholera (10·13); fevers (7·35); general dropsy (6·25); injuries (4·94); spleen diseases (3·54); and debility (3·12). The death-rate of cholera (per cent. of cases treated) was 55·98, against 47·12; of dysentery 41·33, against 42·32; of diarrhœa 36·74, against 38·35; of fevers 8·70, against 8·21; and of injuries 7·59, against 6·90.

These statistics indicate the most prevalent and fatal diseases among the rural population of Bengal, and the remarkable similarity which obtains in the totals derived yearly from a compilation of the statistics rendered by so many different institutions attests their general truth and accuracy.

The following statement shows the income of 1872 (exclusive of balance in hand and price of European medicines and books supplied by

Comparative income of dispensaries,

Government) as compared with that of the five previous years, and the percentage of the various items which compose it :—

YEARS.	Total income.	PERCENTAGE OF INCOME TO THE TOTAL INCOME RECEIVED FROM—				
		Government.	Local funds.	Interest on invested capital.	European subscriptions.	Native subscriptions.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1867 ...	228,918	48·23	18·90	6·88	9·74	16·22
1868 ...	267,467	43·24	22·08	7·51	9·44	17·73
1869 ...	282,689	46·84	18·68	6·52	8·61	19·15
1870 ...	294,788	41·45	21·17	6·23	9·99	21·15
1871 ...	308,773	48·71	16·15*	5·44	13·70	20·94
1872 ...	291,601†	38·61	17·40†	7·09	7·47	29·43

* 4·07 from Municipalities and Town Committees, and 12·08 from all other local sources.

† 3·97 ditto ditto ditto, and 13·43 ditto ditto.

‡ Exclusive of Rs 40,612, the cost of medicines, books, forms, &c., supplied by Government.

The gross income is less than that of the two preceding years, but larger than that of the three other years. This diminution is greatly owing to the removal from the account of the hospitals and dispensaries situated in Calcutta and its suburbs. The proportion of income derived from Government is less than in any year of the six, and lower than in 1867 by 10 per cent. The amount derived from local funds, municipalities, and committees, is larger than in 1871, but less than in the remaining four years. Interest of invested funds has contributed a larger share of income than in any year, except 1868. Subscriptions and donations obtained from Europeans show a less percentage than in previous years, owing to the exclusion from the table of some large hospitals, such as the Howrah Hospital, now reported on under the heading of Calcutta Medical Institutions. On the other hand the contributions of natives have undergone a marked advance, even allowing for the withdrawal of these institutions. This has been due to efforts made under the orders of Government to realize promised subscriptions in some dispensaries, and to raise by increased contributions the status of others. New dispensaries have also helped to swell the sum total.

In the appendix will be found statements showing a return of the charitable dispensaries in Bengal, and also of the diseases treated and the deaths which resulted from them in the principal Hospitals.

The further reports of Commissioners on the working of the scheme

Working of the scheme for training native women in practical midwifery.

for training native midwives showed that slightly more favorable results were being here and there obtained

than had been anticipated in last year's report.

The Lieutenant-Governor has directed that in the places named

Cutwa.	Moorshedabad.	on the margin a further trial be
Ooterpara.	Dacca.	made before abandoning altogether a
Serampore.	Arrah.	measure which promises so much
Hooghly.	Mozufferpore.	practical benefit if prejudice can only
Dinagapore.	Chittagong.	be overcome.

The obstacles which stand in the way of success appear to be various. First there is the difficulty of inducing the regular midwives to attend for instruction and to practice on the European system. This can only be met by the exercise of the influence of popular native practitioners, or of enlightened native gentry. The Lieutenant-Governor believes that in this, as in most other matters, a great deal that seems impossible and hopeless at first would be found practicable in time by officers taking a keen interest in the subject, and living on good terms with the native community. The continued attention of Magistrates and medical officers was asked to this matter.

During the year a hospital for children was established in a central situation in Calcutta by the American Zenana Mission. The institution was placed under the charge of Miss Mary F. Seelye, M.D., a member of the mission, and a graduate of medicine. Its usefulness was certified to by medical officers of Government, and the Lieutenant-Governor being satisfied that its establishment was a boon to the children of the poorer classes in this city, made a grant-in-aid to the institution, on Miss Seelye's application, of Rs. 150 per mensem for one year.

The lunatic asylums in Bengal are at present six in number; five for Natives and one for Europeans.

LUNATIC ASYLUMS.

We have no very trustworthy information as to the precise amount of lunacy throughout the country, nor any accurate means of estimating *a priori* the sufficiency of the provisions made for dealing with it, and therefore only judge of this from the growth of the actual insane population of these institutions.

The census showed 19,698 as the total number of insanes and idiots in all Bengal; but unless the native population is most singularly free from the taint of madness, these figures cannot be accepted, giving as they do a percentage on population of only, .0306, as against .25 per cent. actually under surveillance in England. The general temperance of the people here would account for much of the difference, but we cannot feel confidence in the census returns as regards a detail of this kind.

Lunatics are brought into the asylums in the following ways,—(1) by order of a Magistrate when found wandering at large, reported to be dangerous, or neglected by their friends; (2) by order of Government when under trial for, or when found to

Grant-in-aid to the Calcutta Children's Hospital.

Number of insanes as shown by census returns.

Mode of admitting lunatics into asylums.

have committed, crime; (3) by Government order of transfer from a jail in the case of prisoners becoming insane after conviction; (4) at the request of friends; (5) by order of a civil court. The last two form a very small class indeed in Bengal, and consist chiefly of European and Eurasian patients.

It is found that the population of the asylums is increasing at the rate of about 7·5 per cent. per annum, and that the accommodation

New asylums.

afforded by the existing asylums is in immediate need of extension. The Government is taking steps to meet this demand. A new asylum is being built at Berhampore. Another has been sanctioned at Cuttack. The district jail of Midnapore, when depleted by the central jail, may possibly also be taken over for this purpose; and additional accommodation has been provided at Dullunda, near Calcutta, and Dacca. A small asylum for Assam is also in contemplation.

In the five native asylums of Dullunda, Dacca, Patna, Cuttack, and Moidapore, the total number of

Number of patients treated.

patients treated during the year was 1,352; the daily average strength 903·2; the discharges 264, of whom 67 were transferred to the care of their friends; and the deaths 116, being 8·6 per cent. of treated, or 12·8 per cent. of daily average strength. There were only four deaths from cholera during the year, as against an average of 10·4 in each of the preceding five years.

Out of the daily average of 903·2 patients, 195, or 21·6 per cent., were criminal lunatics. The criminal lunatics are increasing at a more rapid rate than the general lunatic population, and the Lieutenant-Governor has, upon the reports of the Surgeon-General, resolved to provide a separate asylum, not for criminal lunatics as such, but for dangerous lunatics of any class; and the only question for decision now is, whether it would be best to utilise the old jail at Midnapore or the new building at Berhampore, or to build a special asylum near the line of rail. In the meantime work is being done to relieve the crowding of the ordinary asylums.

The rate of admission during 1872 seems to have been in excess of the average, and this is attempted to be accounted for in various ways—

Rate of admission.

dengue fever, the heat of the season, increased activity among the police, a wave of periodicity in the disease itself, being all assigned as possible causes. No clear conclusion is attainable.

Of those admitted, 70·5 per cent. were Hindoos, 26·3 per cent. Mahomedans, 1·1 Christians, and 2·1 belonged to other classes. Most admissions and most cures take place at the ages between 20 and 30.

The death-rate of the asylums was, as already noticed, less than in previous years; but the number of deaths during 1872 was considerably

Death-rate of asylums.

in excess of 1871—116 against 101 (106·2 being the average of five years). As compared with those of other provinces, Bengal asylums show very favorably, 12·8 being a lower percentage on daily average strength than was found in any other asylums of Upper and Central India, save Nagpore (10·5), and Bareilly (12·4), while the average of all the asylums in the North-Western Provinces,

Punjab, Oudh, and Central Provinces, was 20·5. It is curious that while Bengal jails contrast so badly with those of other provinces, its asylums should show so favorably.

The total expenditure of the five asylums was Rs. 88,057-7-1, and the average cost of each patient was Rs. 97-8-3. Rs. 27,635 were realized by sale of articles, while the value of lunatic labour rendered to the asylums was Rs. 14,703.

Almost the whole cost of the asylums falls upon Government, and although the law gives power to Magistrates to compel payment of expenses by the relatives of those confined when their circumstances warrant it, this power is seldom exercised, and save in the European Asylum at Calcutta, and in the case of a few patients at Dullunda, the whole cost of maintenance is defrayed by the State. Magistrates have lately had their attention called to the provisions of the Act on this point.

On the whole the Lieutenant-Governor believes the management of our native asylums would compare favorably with that of similar institutions at home, allowance being made for the different circumstances and character of the patients and their attendants. We never hear of brutal treatment of the insane in Bengal asylums. The lunatics do a considerable amount of work with good effect, and the mortality is not higher than might be expected from the enfeebled condition in which most of them reach our hands: 20·7 per cent. of the deaths take place within three months of admission, 34·5 within six months, 39·6 within nine, and 44 per cent. within the year—figures which show that many cases are almost hopeless from the first.

At Dacca an experiment is being tried of boarding out harmless chronic lunatics on the Gheel system. This is interesting and novel in India, and will be closely watched. Meantime it helps to relieve overcrowding.

Much interesting discussion has taken place about the effect of drugs on insanity, but no clear proof has been obtained that they have a direct influence, though they no doubt act injuriously where there is a predisposition that way.

Bhowanipore is the European Asylum, and its statistics are treated apart. It had thirty-five inmates at the beginning of the year. Sixty six admissions took place, of which twenty-two were soldiers. Forty-seven patients were despatched to Europe. There was but one death.

This asylum is exceedingly well managed; and though its buildings admit of improvement, this is of less importance, as in the majority of instances the patients only remain while arrangements are being made for sending them to Europe.

CHAPTER XXVII.

VACCINATION.

VACCINATION is carried on in Bengal on two distinct systems. There is first the circle system, under which a group of districts is placed under a Superintendent with a subordinate establishment which is supposed to work steadily spreading protection over the whole area, meeting at the same time outbreaks of small-pox where these occur. Then there is dispensary vaccination, as it is called, where a municipality or a charitable dispensary entertains one or more vaccinators working locally under the supervision of the Civil Surgeon. We have now circles embracing—(1) Calcutta and its suburbs; (2) the Metropolitan districts lying round Calcutta; (3) the Darjeeling group, including most of the Rajshahye and Cooch Behar divisions; (4) the Chota Nagpore division; (5) the Sonthal Pergunnahs; (6) part of the Dacca division (lately opened). On the whole the vaccine season of the year under review presents features of activity, success, and promise, which have not characterised any previous year in the whole history of vaccination in Bengal.

The number of persons vaccinated has undergone a very marked augmentation, and the outturn of the season is larger than that of any previous year; the increase over 1871-72, amounts to 321,784, or 88 per cent. A higher percentage of successful results in primary operations has also been gained than in previous years, but the

VACCINATION CIRCLES.	Total number vaccinated.		RATIO PER CENT. OF SUCCESSFUL CASES.			
			Primary vaccination.		Secondary vaccination.	
	1872-73.	1871-72.	1872-73.	1871-72.	1872-73.	1871-72.
Calcutta and Suburbs	81,483	20,535	99.51	99.58	23.16	25.90
Metropolitan Circles...	287,074	91,516	99.78	99.58	55.26	14.28
Darjeeling Circle ...	106,399	111,709	98.97	85.09	.....	.....
Ranchee " ...	36,518	35,650	95.29	91.43	25.92	.....
Sonthal Pergunnahs ...	11,071	8,352	95.09	90.88	80.00	.....
Eastern Bengal Circle	47,540	.....	99.73	.....	29.72	.....
Dispensary vaccination	187,312	97,860	89.33	89.73	61.13	76.30
Total ...	687,406	365,022	96.20	91.51	35.54	40.58

Lieutenant-Governor does not himself altogether credit the very high percentages shown in the returns of some circles. In secondary vaccination, i.e. when vaccination is attempted on a subject who has been

already protected by previous vaccination, or inoculation, or small-pox, the percentage of success is of course much smaller; but even here there are remarkable variations in the returns, ranging as the percentages do from 23 per cent. to 80. The operations, as compared with the population, are still far below the requirements of the province. Taking the population at 68 millions, and the birth-rate at only 80 per thousand, the annual production of persons requiring protection amounts to 2,040,000. The total number of vaccinations does not quite reach one-third of this number. The total cost of vaccination amounted to Rs. 78,286-12-5 for the official year 1872-73, being at the rate of 2 annas 5 pie per case, as against 4 annas 2 pie in the year preceding.

Much of the rapidly growing success of the department during the last few years has been due not only to largely increased establishments, but to the efforts made to engage the indigenous inoculators. As vaccinators, 472 men of this class were employed last year, as against 163 in 1871-72.

In Calcutta vaccination is costly, and the amount of work done less than outside, because it is said the circumstances of the place necessitate constant house to house visitation, and reiterated personal persuasion. It is hoped that there will be improvement in future.

In the Metropolitan circle the people are fast now accepting vaccination, and with increased establishments the whole area is being protected at a fairly rapid rate. The Darjeeling circle covers such a vast area, that it is impossible for the Superintendent to give to every part of it that close supervision which is essential. But much has been done lately to systematise the mode of working, and sanction has been given to increase the establishment. In Chota Nagpore also more method has been introduced, and in Maunbhoom and Singbhoom ex-inoculators are doing nearly all that is required, leaving the Government vaccinators to work elsewhere.

The Eastern Bengal Circle is a new one, and the establishment, which is not yet up to sanctioned strength, has been working in the Dacca district only as yet. A fair beginning has been made. As regards dispensary vaccination, this varies with the interest which Civil Surgeons take in this branch of their work. In Midnapore much is done locally, so that the Government circle establishments are able to pass over the district. But few other districts come up to this standard.

All our experience (and there has been much correspondence on this) proves that the only effective way of spreading vaccination primarily is by concentrating operations and working systematically over specified areas. Then the best way of maintaining the standard of protection is by inducing vaccinators or ex-inoculators to settle down for local practice, supervising their work as far as possible, but leaving them to make their own arrangements about fees. This is the system upon which the department is at present trying to work.

Inquiry has been made during the year as to the sufficiency of vaccine provision in places where inoculation has been legally prohibited. On the whole the result was more satisfactory than might have been anticipated, and with one or two exceptions the staff of vaccinators

and ratio of operations was found to be sufficient. No further extensions of the Act prohibiting inoculation are, however, in contemplation in present till the area already in hand is thoroughly protected.

A return of vaccine operations in Bengal during 1872-73 is given as the appendix.

CHAPTER XXVIII.

EDUCATION.

THE extension of primary instruction throughout the country has been pressed forward with much earnestness, and the chief educational

feature of the year has been the successful introduction of the new scheme for the establishment or aiding of village schools called patshalas, which was briefly announced in the last report.

Under the various systems heretofore in force, there were in existence on the 31st March 1872 no more than 2,451 boys' schools classed as primary aided or supported in any way by Government, and these schools only mustered 64,779 pupils.

Statistics of primary schools.

On the 31st March 1873 the primary schools maintained under the old systems are returned at 2,719, and their pupils at 73,998, showing an increase of 268 schools and 9,219 pupils over the numbers of the previous year; while under the new system we had established or aided

* PRIMARY SCHOOLS.

	Schools.	Pupils.
Government lower schools ...	29	896
Grant-in-aid lower schools ...	346	9,673
Circle lower schools ...	183	7,527
Patshalas under the old scheme ...	2,161	55,902
Total under old systems ...	2,719	73,998
Patshalas under the new scheme ...	5,917	141,413
Grand total of primary schools ...	8,636	215,411

and brought under systematic supervision no fewer than 5,917 additional village schools with muster rolls containing 141,413 pupils. The whole number of primary schools connected with the Education Department had thus risen within the year 1872-73 from 2,451 to 8,636, and their pupils from 64,779 to 215,411.*

The State expenditure on all classes

† PRIMARY SCHOOLS.

	Cost to the State.
	Rs.
Government lower schools ...	5,468
Grant-in-aid lower schools ...	22,955
Circle lower schools ...	11,005
Patshalas under the old scheme ...	1,05,985
Total expenditure on primary schools under old systems.	1,45,413
Patshalas under the new scheme ...	48,877
Grand total of expenditure on primary schools.	1,94,290

of primary schools in 1871-72 was shown to be Rs. 1,28,356. The corresponding expenditure last year for primary schools under the old systems was Rs. 1,45,413, and Rs. 48,877 was spent on the 5,917 additional patshalas returned under the new scheme.† This gives an expenditure of little more than Rs. 8 on an average for each of the new patshalas, indicating, what is the fact,

that the great majority of these schools were only taken in hand in the

last few months of the year. For the current year an additional grant of four lakhs of rupees has been made for village schools, making the total village school grant Rs. 5,30,000.

Later returns, which bring down the statistics of primary schools to about the end of August 1873, show the total number of schools then in operation at 10,787, with an estimated attendance of 255,728 pupils. Thus the number of schools had then further increased by 2,151 since the 31st March last, and the number of boys under instruction by 40,317. At the average rate of Rs. 36 per annum for each school, the additional Rs. 4,00,000 sanctioned for the current year will provide for over 11,000 schools with some 250,000 pupils, making with those previously at work upwards of 13,000 schools with upwards of 300,000 scholars. It is hoped that this end will be attained in the present year.

These statistics sufficiently indicate that the anticipations which the Lieutenant-Governor felt himself justified in forming have been fulfilled.

A successful introduction of primary schools. A successful beginning has been made. Difficulties have been met, and in a great measure overcome by the tact and energy of the officers employed. A system of primary education, simple and even rude at present, but capable of steady improvement, has been started in every district; and if the state of the public finances should allow of the appropriation of funds in future years for the continued extension and development of what has now been begun, there seems no reason to doubt that elementary instruction may by degrees be spread very widely amongst the vast rural population of Bengal.

The reports detail at length the various obstacles that the scheme has encountered at the outset.

In some districts difficulties have been caused by the suspicious prejudices of the people and the spread of sinister rumours regarding the designs of the Government. Nowhere has any active hostility been displayed, but real alarm has in some cases held the people aloof, and in other cases indifference and apathy. Many of the people see no reason why their children should learn what they never learnt themselves; they require their help in the fields or at their handicrafts; and they do not wish to change old customs. In many places the people took to the schools with avidity from the first, and in all districts they now freely resort to them.

Occasionally it has proved difficult to find fairly competent teachers;

Teachers.

and when teachers have been found and new patshalas had been established or old ones assisted, a more troublesome cause of failure has arisen in the general disinclination of the parents to pay anything in the shape of fees to the village schoolmasters or gurus. This is especially the case in Behar; but the same evil is more or less prevalent in all districts. The people argue that as the Government now pays the guru, there is no reason why they should contribute anything for his support; and so it was feared that he might be left to maintain himself as he can on the small patshala grant allowed to him. This is perhaps the most serious and widely-spread difficulty that has yet showed itself, but it is believed that it has been somewhat exaggerated, and hoped that it will be gradually overcome.

As soon as the work of getting out the grants was fairly taken in hand, it was everywhere found that the

Inspection.

existing staff of subordinate inspecting officers was inadequate for the new requirements, and applications were received from all quarters for additional assistance. This has been supplied as far as possible. A considerable number of sub-inspectors have been appointed on low salaries for the supervision of the new schools, and more must no doubt be added from time to time as the scheme extends and village schools multiply; for it is urged on all hands, and it is no doubt the case, that constant inspection at short intervals is an absolutely essential condition to secure the maintenance and efficiency of elementary schools in country districts.

These officers have also to be employed as far as possible to pay the gurus. It has been found somewhat difficult to arrange for the regular distribution of the monthly allowances, and various expedients are resorted to in different districts. In some cases the police are employed to distribute the money—a plan which is not in itself desirable, and it is often unfortunately necessary for the teacher to travel considerable distances to receive his grant. Experience will no doubt lead to improvements in this respect.

The subsidies allowed to the patshalas brought under the scheme are for the most part given in the shape of fixed allowances to the school-

Grants-in-aid.

masters ranging from Rs. 2-8 to Rs. 5 a month; but in the Midnapore district, as will be further explained below, a system of payment by results has been attempted depending on periodical examinations. This plan will perhaps be found to work successfully in districts where indigenous schools are numerous.

Like other large groups of schools which are placed together under

System of instruction.

one class, the new patshalas are reported to vary greatly in their pretensions and efficiency; but the general standard aimed at is that laid down by Government, being confined for the most part to reading and writing in the vernaculars, with native arithmetic and accounts. In some patshalas, however, English arithmetic appears to have crept in, and it is said to be generally preferred where it has gained a footing.

That the general results of what has been attempted are favorable, will be gathered from the following expressions of opinion gleaned from the educational reports.

In the Burdwan division the Commissioner reports that the new scheme

Burdwan division.

has been fairly started, but he considers it premature to venture an opinion as to the success of measures so recently introduced and of such great intrinsic importance. He regrets that little was actually effected before the end of the year for the development of primary schools except in the Midnapore district, where "the money was spent in encouraging the boys and teachers on a scale which will no doubt have produced an extraordinary stimulus this year, but which the Magistrate could hardly afford to repeat every year." Much has been done in all the districts in the present year.

The Inspector writes:—"That education in primary schools is likely to be stimulated and fostered in village schools under the new

system, there can be no doubt," and he reports that on all sides applications for assistance are coming in from patshalas never before heard of.

In the Midnapore district, out of 1,729 indigenous village schools which were discovered to be in existence, containing 19,174 pupils, about 700 schools with 13,000 pupils had accepted the offer of connection with Government before the end of the year. The district was divided into ten circles, and the gurus were invited to bring their boys to the centres, at which a general examination was held, on the result of which the gurus received their rewards. The general subjects were reading, writing, and mental and written arithmetic; and four annas per boy was given for each subject, or one rupee for each boy who passed in all four subjects, besides which eight annas was allowed for every boy who could pass in mahajani and zemindari accounts, and one rupee for those who could measure land. The Magistrate, Mr. Harrison, to whom this scheme is due, considers that "the examinations proved a great success, and were ably and impartially conducted by the inspecting officers, the schoolmasters, and the principal non-official gentlemen at the centres, who exhibited a lively interest in the proceedings." The Inspector writes:—"The advantages of this system, if it can be efficiently carried out, are palpable."

The Director considers the principle of the plan good, but awaits further experience before expressing an opinion as to the practicability of working it permanently.

The returns show that out of 20,501 pupils in the patshalas of the Burdwan division, 19,055 were Hindus and only 1,116 Mahomedans.

In the Presidency division the Commissioner considers that a marked impulse has been given to primary education by the introduction of the new scheme, though it has not yet commended itself to the upper and middle classes owing to a fear that their own position will be affected by it and their influence diminished. It is also said that they regard every rupee spent on primary education as so much diverted from the only legitimate object of expenditure on schools, viz. English education.

The Inspector reports that the work of taking up schools was done expeditiously, as "the Magistrate had money at hand and was unfettered by restrictions." He explains that rapid progress was less easy for the Inspectors of Schools, who, previously to the orders of the 30th September, were required to establish village schools in concert with the local authorities. "It is evident," he writes, "that the Magistrate as ruler of the district, unfettered by restrictions, can plant schools faster than is possible for Inspectors armed with no power; but whether the schools so planted will strike root in a friendly manner remains to be seen. Schools should be so planted that they will grow. Inspectors, acting only with local sympathy, had formerly tried so to choose the soil that the plant would thrive. Still the work has been well begun, and is thus far a great success."

Up to the 31st March last 1,871 patshalas had been established or assisted. The average monthly allowance for a school was about Rs. 3.

In the primary schools of all kinds in the Presidency division the returns show that there were 33,990 Hindus, 13,663 Mahomedans, and 443 Christians. The new patshalas alone contain 7,431 Mahomed-

ans against 13,837 Hindus. Mr. Woodrow remarks that the Musal-
mans of Bengal belong for the most part to the cultivating classes, and
that even where they form a majority of the population, they do not
form a majority of the well-to-do classes, and that hence they are found
most numerous in the lowest class of schools. The Director supports this
view, and is of opinion that the Mahomedans of the upper and middle
ranks are generally better represented in proportion to their numbers
in the higher and middle schools than has been commonly supposed.
Statistics do not, however, support this latter view.

The Rajshahye Commissioner reports that the new system of aiding
patshalas with small grants has been
introduced in his division with much
intelligence and interest by the Magistrates and the subordinates of the
Education Department acting under them. It is said to be popular,
and promises to be capable of expansion to the full extent that money
can be made available.

The Inspector shows that out of 835 patshalas allotted to his district,
no fewer than 800 were actually established and in operation before
the 31st March; and he asserts that the rapidity with which the schools
were taken up in this division is mainly due to the old patshala scheme,
which had been worked there for years, with training schools for teachers.
The growth and extension of patshalas under that scheme had been
checked by financial restrictions for some years past; but the inspecting
officers were well acquainted with the sites of the indigenous patshalas
and the capabilities of the different villages, and as soon as the money
restriction was removed, they were able at once to go their rounds, fill
in their returns, and name the gurus they could recommend for patshala
grants. This statement must be received with much qualification.

Out of 36,997 pupils of primary schools who are classified in
the returns of this division, it appears that the Mahomedans number
18,380, and the Hindus 18,613; but only 2 Mahomedans appear
amongst the upper classes of society against 12 Hindus, and in the
middle classes there are only 1,749 Mahomedans to 3,777 Hindus. The
strength of the Mahomedan community is in the lower classes, which
contribute 16,629 Mahomedans to primary schools against 14,824 Hindus.

In the Cooch Behar division 90 patshalas were established during
the year, and on the 30th March con-
tained 1,745 pupils. The Commissioner
reports that the great difficulty in the way of extension of schools
is the want of competent instructors. "Indigenous schools are few; the
mass of the people are totally illiterate; educated men, save foreigners,
are few, if any."

The returns show 139 primary schools of all kinds, containing
1,707 Hindus and 685 Mahomedans.

In the Dacca division the measure is reported to have been worked
with the utmost cordiality and zeal by
every officer, and to have been well
received by the people generally. The funds allotted for primary schools
have been laid out with much care and trouble; but the Commissioner
remarks that the majority of the people never expected, and do not wish,
that the sons and daughters of the fishermen and cultivators of the

field should be educated *en masse*. It is believed that a large proportion of the pupils got together in the new schools would have received some education independently of them, and would not have grown up wholly uneducated. The very lowest stratum of society is hardly at present very largely educated even by these village patshalas.

The Inspector confirms these statements:—"Nothing is more remarkable," writes Mr. Clarke, "than the cordiality with which the people have received these Government patshalas, as reported by every Deputy Inspector, not merely in the central districts but even in Cachar, where the want of a taste for education has hitherto been deplored in so many reports." Comparatively little money had been spent on the new schools out of the 30th September grant up to the end of the year, but a very large number were at work. The delay in drawing the money arose chiefly from the condition that the local authorities were to be consulted in the distribution of it, but it is explained that this was of little consequence, because the schools knew that they would ultimately receive their grants from the date on which they began regular work. Mr. Clarke reports that a large number of the boys brought into the new patshalas had previously learnt to write and do a little Bengali arithmetic up to the standard of their years. He has rarely visited one of the new patshalas even in the most unfavorable districts where he has found all the boys beginners. They had generally learnt something at home from a father or uncle; less frequently they had been taught in a shop or office.

It has been urged, he says, that these boys would have acquired all that they needed without the intervention of Government or the expenditure of public money, but he justly argues that this home education is of a very limited and non-progressive type; that though many of the boys who come to the patshalas can do a little writing and bazar arithmetic, very few indeed can read, and many are anxious to come to school to learn the art of reading; that the opening of a patshala in a village causes a number of little boys to commence education who would never have commenced at all at home; that the laying out a large sum of public money has given an impulse to primary education which is sure to tell somewhere; and lastly, that when we have once got boys to attend a school regularly, it is possible to commence improving the education given them, which at home is practically impossible.

The Director also adopts this view, and holds that the improvement of indigenous education will be a certain result of the establishment of the new schools.

Mr. Clarke notices, like Mr. Woodrow, that the Mahomedans appear most numerous in the lower class of primary schools. He says on this point:—"The opinions advanced by the Magistrate of Mymensing last year, viz. that the patshala education was that fitted for the Mahomedans, has been amply verified in the new primary schools." I need not report further," he adds, "on the measures which should be adopted to attract the Mahomedans of the upper and middle classes to our schools. But I may remark that if the measures now ordered to be adopted should not appear to attract many, we ought not to be greatly surprised, as in Eastern Bengal there does not exist any great body of Mahomedans of the upper and middle classes."

From the Chittagong division the Commissioner reports to the same effect. The establishment of primary schools has been carried out with complete co-operation on the part of the people and the district officers. The new scheme has given a marked impetus to education, and has been received with at least temporary enthusiasm. Here, as elsewhere, education is regarded as the road to an income, and the desire for it is said to be very great. There has been no difficulty in placing out the allotted funds, and the growth of schools has been rapid.

"We are now in a position," writes the Inspector, Mr. Clarke, "to estimate what has been effected by the new primary patshala grant of 30th September 1872. Between 1st January 1873 and 1st April 1873 it has added 8,081 boys at school (almost all in the primary stage) to the 5,150 who were at school before, in schools aided or under inspection. These boys were in 276 schools, nearly all of which were new schools. In the district of Noakhally the number of boys at school was raised at a blow from 887 to 3,435, exclusive of the 'unaided schools,' of which many would be patshalas called into being by the hope of getting a primary grant. Nearly half of the new schoolboys were Mahomedans. And this effect was produced in what we have always hitherto considered a backward zillah with a population prejudiced against education. The people have in fact everywhere welcomed cordially the new schools. They are everywhere ready to learn writing and native accounts at the Government expense. I have always thought they were; but the success of the new primary schools in such districts as Noakhally and Cachar has been beyond my most sanguine expectations."

In the Patna and Bhaugulpore divisions the difficulties have no doubt been greater than in any other part of Bengal.

Behar.

This was naturally to have been anticipated, as Behar has never responded to any of the efforts that have been made for its educational improvement. Nevertheless the new scheme has met with very fair success, considering the unfavorable conditions it had to encounter.

In the Patna division the Commissioner shows that the scheme has been very successfully worked out. In the beginning, he reports, much foolish fear and apprehension was shown by the people regarding the object of Government in establishing these village schools. "One Magistrate says they fear the Government *et Dona ferentes*; another says, they ask of Government, Can any good thing come out of Nazareth?" "The rumour that Government were going to educate the people with a view to shipping them off to the Colonies was very general; another, that the gurus were to be paid in order to become Government spies, and give information for new taxes, found scarcely less favour; a third was that the zemindars were to have the Government grant added to their revenue." Nevertheless the people, as usual, showed themselves exceedingly amenable to authority. "The distrust of these schools," writes Mr. Bayley, "has now almost disappeared, and they are progressing most favorably."

In the Bhaugulpore division the Commissioner reports that the orders of Government have been strictly carried out and patshalas established in every district except the Sonthal Pergunnahs, where virtually

nothing was done within the year. But he writes:—"In my opinion the real work, however, only now begins, in a struggle to see whether the new schools can be fostered into real life until they become progressive institutions in the country, or whether after a nominal existence they will dwindle and die out. I do not desire to conceal for a moment my opinion that the present existence of all these schools is artificial and attributable to the zeal and energy with which Government officers have laboured in the cause, and the same attention must be bestowed for time to come in order to preserve them; but if only they can be kept going long enough to admit of the Government officers stirring up the interest both of the zemindar and the people in the case of each individual school, I feel very sanguine of success, for after all village schools or patshalas are no novel institutions with the people of this country." Much opposition and prejudice had to be overcome in this division, and the zemindars, as a rule, held aloof and did not render as much assistance as could have been wished. Active measures have since been taken to introduce primary schools in the Sonthal Pergunnahs.

In Orissa a commencement schools and bringing them under control.

The Commissioner reports that the system has been initiated with very tolerable results. He had not pressed the too hasty expenditure of the grant, being of opinion that changes require to be slow to be permanent. Indigenous patshalas are numerous, but the attempt to bring them under the new system appears in some parts to have given rise to misconception on the part of the people, and prejudicial rumours have been in circulation. These difficulties will no doubt be overcome by tact and perseverance.

Little had been done in the Cuttack district before the end of the year, but progress has since been made. In Balasore and Pooree 213 new patshalas had been taken in hand with an attendance of 4,471 pupils, of whom 4,194 were Hindus and 261 Mahomedans.

The Chota Nagpore primary schools are reported to have been taken up to the full extent of the allotted grant, and the Commissioner believes that, with few exceptions, they are doing well.

He reports that out of the 470 patshalas assigned to the district by the orders of the 30th September, 416 had been established by the 1st March with a muster-roll of 15,871 pupils. The main difficulty was to procure a sufficient supply of teachers. Education has generally been regarded by the agricultural and labouring classes as something altogether unsuited to their condition and capacity. They appear to be indifferent to it, but not actively hostile.

In Assam, if there is no very active desire for education on the part of the people, there is a general willingness to accept it if it is brought within their reach. It is said that teachers are found with difficulty, but new patshalas have been started in every district, and a decided impulse has been given to the spread of primary education.

The primary schools of Assam have increased within the year from 95 to 293. This seems satisfactory, but the Commissioner is of opinion

that the establishment of some of the schools has been a little too pressed. He pronounces it too soon to form a fair opinion of the working of the new patshalas. The Inspector, Mr. Martin, makes the same remark, but he adds: "There is no doubt, however, as to their popularity, and they must prove in time a great boon to the people."

At the end of the year the patshalas contained 7,463 pupils, of whom 6,656 were Hindus and 508 Mahomedans.

Secondary instruction is provided in schools which are intermediate in standard between the primary or lower schools and the colleges affiliated to the University, which admit only matriculated students who have passed the University Entrance examination. They are divided into middle schools and higher schools. The higher schools educate up to the Entrance standard, and in all of them English is not only taught as a language, but is also the medium of instruction, except in some of the lowest classes. In some middle schools English is taught, and in others the whole of the instruction is in the vernacular. Middle schools are consequently classed as English schools or vernacular schools, accordingly as English is or is not taught in them. The standard aimed at in the middle English schools is that laid down in the course for minor scholarships, representing a stage of progress from two to three years short of that reached in the higher schools. In the same way the vernacular scholarship course defines the standard aimed at by the middle vernacular schools. It is the same as the standard of the middle English schools in all subjects except English. All schools, however, both middle and higher, begin with nearly the earliest rudiments of education in their lowest classes, and in fact a very large proportion of their pupils are in the primary stage of instruction. On this account a large proportion of the pupils in middle and higher schools should really be classed under primary instruction, and it results that out of a total of 303,110 pupils included in the returns, 153,088, or more than one half, are entered under the lowest section of the primary stage, which is supposed to occupy two years, comprising the beginners who cannot yet read, write, and understand easy sentences in their mother tongue, and 101,336 more are entered under the upper section of the primary stage, not having yet reached the standard of the third class of a "middle" school reading the vernacular scholarship course. The two sections of the primary stage together are supposed to cover four years of schooling, and thus out of 303,110 pupils at school no fewer than 254,424 are still in the primary stage, and have received less than four years' teaching, leaving 48,424 for the upper and middle stages, of whom 6,676 are in the upper stage, corresponding to the two upper classes of a "higher" school reading the University Entrance course, and 42,013 are in the middle stage, which is supposed to occupy four years and is intermediate between the primary stage and the upper stage. But besides the above there are about 99,000 children attending the new patshalas, who have not yet been returned

SECONDARY INSTRUCTION.

in the classified lists, and as these must all be in the primary stage, the aggregate number of children in that stage is now about 353,303, against 42,000 in the middle stage and 6,700 in the upper stage.*

* Pupils in the primary stage (4 years) ...	353,303
" middle " { 4 " } ...	42,010
" upper " { 2 " } ...	6,676
Total ...	401,988

against 42,000 in the middle stage and 6,700 in the upper stage.*

The returns show 1,374 Government and aided schools of the middle class at the end of the year, with an attendance of 66,545 pupils. Of these schools 432 are classed as "English" with 22,038 pupils, and 942 as "vernacular" with 44,507 pupils. Compared with the returns of the previous year, these figures shew a loss of 87 schools and 3,551 pupils.

MIDDLE SCHOOLS.	1871-72.		1872-73.	
	Schools.	Pupils.	Schools.	Pupils.
GOVERNMENT SCHOOLS—				
English	9	902	4	487
Vernacular	213	11,740	184	11,020
AIDED SCHOOLS—				
English	477	23,402	428	21,551
Vernacular	703	33,063	748	35,487
Total	1,461	70,006	1,374	66,545

The Government English middle schools have been reduced from 9 to 4, shewing a loss of 5 schools and 415 pupils; but these 5 schools have merely risen in standard and re-appear as higher schools in the present returns. There appears to be a loss of 49 aided English middle schools with 1,941 pupils; and there is a further loss of 19 Government and 15 aided vernacular middle schools with an aggregate of 1,195 pupils. While the rules and expenditure were being revised, new grants were stopped for a time; and when they were again allowed, the accounts of the educational department were so incomplete that the money saved by lapse of old grants remained unspent, and the schools that failed were not replaced by others, as would have been the case if the money had been sufficiently used. No explanation is given of the loss of Government vernacular schools. It appears to be apparent only, and due to a change of classification. New grant-in-aid rules have since been promulgated and sums are specifically assigned for distribution by the School Committees of each District. No doubt the available money will now be fully utilised.

Of the whole number of middle schools classed above as "Aided," 989 are grant-in-aid schools with 47,423 pupils (English schools 428, pupils 21,551; Vernacular schools 561, pupils 25,872), 153 are circle vernacular schools with 6,569 pupils, and 34 are patshalas under the old system with 1,046 pupils.

In addition to the above the returns of unaided schools show 96 middle English schools with 5,599 pupils, and 97 vernacular middle schools with 3,932 pupils; but these returns are always defective, and there are probably more such schools in existence than the figures indicate.

The average cost of a boy in the Government middle schools was Rs. 8-18, and in the aided middle schools Rs. 11-8; the State expenditure per head being Rs. 5-4 in the Government schools, and Rs. 4-6 in the aided schools.

The five Government schools which have been transferred from the middle to the higher class have raised the number of Government higher schools from 52 to 57, and the number of pupils has at the same time risen from 10,282 to 11,073, but this increase is scarcely in proportion to the increase in the number of schools. The aided higher schools still number 78, as they did last year, but the attendance at them has fallen from 8,112 to 7,789.

There are also included in the returns 44 unaided higher schools, with an attendance of 11,779 pupils. The corresponding returns for the previous year shewed 47 schools and 11,629 pupils:—

HIGHER SCHOOLS	1871-72.		1872-73.	
	Schools.	Pupils.	Schools.	Pupils.
Government Schools	52	10,282	57	11,073
Aided Schools	78	8,112	78	7,789
Total	130	18,394	135	18,862
Unaided Schools	47	11,629	44	11,779
Grand Total	177	30,023	179	30,641

The ordinary grants allotted to the Government higher schools were revised and reduced during the year, but special extra grants were made to many of them to provide for the teaching of new subjects; and as this money is not generally separated in the returns from the ordinary school income, it does not appear to what extent the reductions had taken effect up to the end of the year. On the whole the returns shew a small increase of Government expenditure to the extent of Rs. 8,037, which is partly due to the transfer of the five middle schools to the list of higher schools. The grants to aided schools remain nearly unaltered.

HIGHER SCHOOLS.	1871-72.			1872-73.		
	State funds.	Local funds.	Total.	State funds.	Local funds.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Government Schools	1,73,987	2,26,596	4,00,583	1,81,994	2,34,278	4,16,272
Aided Schools	51,590	1,37,050	1,88,640	51,843	1,37,959	1,89,802
Total	2,25,577	3,64,246	5,89,793	2,33,837	3,72,237	6,06,074

The cost per head to the State is Rs. 16-7 in Government higher schools, and the total cost Rs. 37-9. In aided higher schools the cost per head to the State is Rs. 6-10 and the total cost Rs. 24-6.

The examination for entrance to the University is the final goal to which the efforts of the higher schools are directed, and the results attained in it afford a very fair test of their efficiency. In comparative purposes though, much doubt has been expressed by many competent men whether this uniform rigidly prescribed course does not lead to cramming and do much harm. The examination of December 1872 was the largest on record, the number of candidates enrolled being 2,144, giving an increase of 242 over the number in the previous year. Of these 938 passed, 1,142 failed, and 64 were absent from the examination.

Of the rejected candidates 865 failed in English, 321 in the second language, 721 in history and geography, and 534 in mathematics. These figures shew that out of the 2,080 candidates actually present at the examination, 42 per cent. failed in English, 25 per cent. in history and geography, 26 per cent. in mathematics, and 15 per cent. in the second language. Thus English was the most fatal subject, as it has always been, and next comes history and geography, in which English composition has great weight. By far the fewest failures are in the second language. The returns do not distinguish between failures in a classical language and in a vernacular, but 61 per cent. of the candidates took up a classic.

The candidates from Bengal numbered 1,717 against 1,503 in 1871, comprising 1,558 Hindus (of whom 15 described themselves as Theists and 75 as Brahminists), 83 Christians, 74 Mahomedans, 1 Sikh, and 1 Buddhist. The first class contains 144 names, the second 372, and the third 221.

More than two-thirds of the whole number of passed candidates, 489 out of 737, were sent up by schools in the metropolitan districts comprised in the Burdwan and Presidency Divisions, including the town of Calcutta. The general distribution is as follows:—

Districts.	Schools.	Passed Candidates.
Burdwan Division	48	186
Calcutta	24	169
Presidency Division...	40	134
Dacca	17	90
Rajshahye	15	55
Patna	8	35
Bhaugulpore	6	17
Chittagong	5	16
Chota Nagpore	3	12
Orissa	4	11
Assam	6	4
Cooch Behar	2	2
Private students...	...	6

178

707

It must be remembered, however, that the best schools in Calcutta and elsewhere, especially the collegiate schools, are largely resorted to by students from distant places, so that the list cannot be taken to represent accurately the proportion of students actually belonging to the several districts enumerated.

In this examination papers were set in no fewer than ten languages besides English, viz. Latin, Sanskrit, Arabic, Bengali, Persian, Hindustanee, Hindi, Ooriya, Armenian, and Burmese.

The following list shows the number of Bengal candidates who took up the several languages in each of the last two years :—

	Decr. 1871.	Decr. 1872.
Latin	47	45
Sanskrit	1,111	1,073
Arabic	49	32
Bengali	240	462
Persian	8	5
Hindustani	42	65
Hindi	3	7
Ooriya	2	14
Armenian	6	1
Burmese	0	1
	<hr/> 1,503	<hr/> 1,717

From this it appears that 80 per cent. of the candidates took up a classical language in 1871, and that the number fell to 67 per cent. at the last examination. Sanskrit largely predominates, but the number of candidates taking it up was smaller by 38 last year than in the preceding year, and proportionally to the total number of candidates the reduction was much greater, 62 per cent. only having taken it up in 1872, against 74 per cent. in 1871. This is no doubt due to the orders of last year, by which the teaching of Sanskrit is no longer compulsory.

Under the scholarship rules of 1867 two-thirds of the junior scholarships were reserved for candidates who passed in a classical language, and Sanskrit was in consequence taught in the four upper classes of nearly all the higher schools in Bengal. This condition of eligibility for scholarships has now been set aside. The teaching of Sanskrit has in consequence stopped in many Government schools, where there is no longer sufficient demand for it.

The University does not demand a classical language at the Entrance Examination, but does so two years later, at the First Arts Examination, and it has been urged that to qualify for this latter the boys should begin early. The Lieutenant-Governor has, however, considered that there is ample opportunity for preparing for the examinations, Sanscrit being still taught in the three highest classes of schools where pupils are available as well as in the University classes.

In truth the Lieutenant-Governor thinks that too much is made of the classical element in the University course, and he hopes that before long the classical languages will at least be left optional subjects for the First Arts, as they now are for the B.A. examination, so that by the restriction of language teaching at school, room may be made for the elements of practical science subjects without injury to the prospects of the students in their subsequent academical career.

With the object of giving a more practical turn to the course for Entrance, the Director laid the following proposals before the University in January last for consideration and discussion.

“That in the schedule of subjects for the University Entrance examination for 1874 and thereafter, the following alterations be made, *viz.*

1. In place of *History* the following :—

History and Geography.

The outlines of the history of England, of the history of India, and of general and physical geography, with a more detailed knowledge of the geography of India.

The historical text-books will be fixed from time to time by the Syndicate (see Appendix B).

(Half the marks will be given for history and half for geography, and in the geographical paper half the marks will be given for physical and half for general geography).

2. In place of *Geometry* the following :—

Geometry and Mensuration.

The first four books of Euclid with easy deductions, and the mensuration of plain surfaces, including the theory of surveying with the chain.

(Sixty per cent. of the marks will be given for geometry and forty per cent. for mensuration)."

These proposals, which were approved by the Syndicate, were ordered to be circulated for the opinion of the heads of affiliated colleges, and the question at present stands over for decision.

The Lieutenant-Governor meanwhile ordered a separate departmental examination in surveying and physical geography for candidates for junior scholarships to be held previously to the Entrance examination, and has restricted the award of scholarships by the condition that not less than one-half the scholarships assigned to each division are to be given to students who have qualified in these subjects. The scholarship award of January 1874 will be made under these orders; but the Lieutenant-Governor has intimated that he will gladly accept the tests proposed to be added to the University Entrance examination instead of a separate examination, and it is hoped they will shortly be adopted; They will certainly improve the Entrance course, and there is much advantage in being spared the difficulty and expense of an additional examination.

The returns of the Entrance examination afford little proof that the Mahomedans are more alive than heretofore to the advantages of an English education. The number that passed in 1872 was 30 only, against 28 in 1871, 39 in 1870, 23 in 1869, and 26 in 1868. During these five years the proportion of successful Mahomedans out of the total number passed has remained almost stationary at about 4 per cent.; but at the last examination only one Mahomedan appeared in the first class, against four in 1871, five in 1870, four in 1869, and two in 1868. Nevertheless the Inspectors' reports indicate that Mahomedan students are sensibly increasing in number in our English schools and making fair progress in them.

School instruction ends with the Entrance examination, which opens the door to the colleges affiliated to the University. In these colleges superior instruction is given to matriculated students in the courses of subjects prescribed for the University degrees in arts. In 1872-73 there were 10 Government arts colleges containing 858 pupils at the end of the year, against 9 colleges and 933 pupils in 1871-72. The college added to the list is the High School at Midnapore, which has been partly endowed by contributions raised in the district. Only four of the Government colleges educate up to the B.A. standard, viz. the Presidency College

and the Colleges at Hooghly, Dacca, and Patna. The Sanskrit College and the Colleges at Krishnaghur and Berhampore, which formerly worked up to the B.A. standard, have now been restricted to the First Arts Course, which is also the standard fixed for the three high schools at Gowhatty, Cuttack, and Midnapore. Since the end of the year the Government school at Rampore Beaulah has been raised to the same standard as the Rajshahye High School, having received a liberal endowment to the amount of Rs. 5,000 a year from a wealthy landowner in the district, Babu Hara Nath Ráy, zemindar of Dubalhati.

There are also 5 aided colleges containing 305 pupils in 1872-73, against 357 in 1871-72. They all educate up to the B.A. standard.

On the whole there is a loss of 127 undergraduate students as compared with the previous year; the Government colleges losing 75 and the aided colleges 52.

This loss is partly counterbalanced by gains in the Medical and Engineering colleges, the attendance having increased at the end of the year by 48 in the former and 29 in the latter. The annual session commences in both these colleges in June, and in the current session the entries have been unprecedentedly large in each of them. The new Civil Service classes have also attracted many undergraduate students; so that on the whole it seems probable that the losses in the Arts colleges may have been fully made good by increases in the departments of special instruction.

The following table gives statistics of the general colleges, both Government and aided.

Statement of Attendance in the Colleges for general education.

Colleges—General.	Monthly fee.	Number on the rolls at the end of the year.				
		1869.	1870.	1871.	1872.	1873.
GOVERNMENT—	Rs. A. P.					
Presidency College	12 0 0	342	397	405	442	395
Sanskrit College	5 0 0	36	29	26	23	26
Hooghly College	5 0 0	134	144	152	142	120
Dacca College	5 0 0	138	117	112	102	124
Krishnaghur College	5 0 0	106	127	116	96	52
Berhampore College	5 0 0	67	56	41	21	24
Patna College	5 0 0	66	65	84	79*	97†
Gowhatty High School	3 0 0	8	15	17	9	4
Cuttack High School	3 0 0	16	22	22	19	14
Midnapore High School	5 0 0	.....	.....	.....	.....	12
Total ...	.....	915	972	975	933	859
AIDED—						
St. Xavier's College, Calcutta ...	5 0 0	32	32	36	36	31
Free Church College, Calcutta ...	5 0 0	99	103	120	107	108
General Assembly's College, Calcutta.	5 0 0	100	86	62	89	74
Cathedral Mission College, Calcutta.	5 0 0	172	148	131	93	74
London Mission College, Cal- cutta.	5 0 0	43	44	45	32	18
Total ...	.....	446	413	394	357	305
Grand Total ...	.....	1,369	1,385	1,369	1,290	1,163

Inclusive of 4 out-students.

† Inclusive of 7 out students.

Two years after entering the colleges the students undergo the first public examination for the degrees in arts, known as the First Arts Examination.

In the F. A. examination of December 1872 there were in all 560 candidates on the University register, against 507 in 1871; and of these 220 passed, 8 were absent, and 332 failed. The candidates from Bengal numbered 463, against 434 in 1871, and 184 passed, viz. 16 in the first class, 61 in the second class, and 107 in the third.

These were distributed as shown below :—

FIRST ARTS EXAMINATION, DECEMBER 1872.

Colleges.	Candi- dates.	PASSED.			
		1st Class.	2nd Class.	3rd Class.	Total.
GOVERNMENT—					
Presidency College	160	15	31	35	81
Sanskrit College	8	.....	1	1	2
Hooghly College	46	.....	2	9	11
Dacca College	43	1	3	7	11
Krishnaghur College	41	.....	4	13	17
Berhampore College	9	.....	1	2	3
Patna College	23	.....	3	8	11
Gowhaty High School	5	.....	.....	.....	.....
Cuttack High School	5	.....	1	.....	1
Total	340	16	46	75	137
AIDED—					
St. Xavier's College	6	.....	1	3	4
Free Church College	41	.....	5	9	14
General Assembly's College	20	.....	2	6	8
Cathedral Mission College	13	.....	1	4	5
London Mission College	12	.....	1	3	4
Total	92	.....	10	25	35
UNAIDED—					
La Martiniere College	3	.....	2	.....	2
Serampore College	11	.....	1	5	6
Total	14	.....	3	5	8
Ex-students and teachers	17	.....	2	2	4
Grand Total	463	16	61	107	184

The great majority of the candidates were as usual Hindoos, who numbered 427 (inclusive of 25 Brahmists, and 22 Theists and Deists); the Mahomedans numbered 22, and the Christians 13.

The list of successful candidates contains 170 Hindoos (with 11 Brahmists and 8 Theists and Deists), 5 Mahomedans, 8 Christians, and 1 Parsi.

The languages taken up besides English, were Sanskrit, Arabic, and Latin; Sanskrit by 437, Arabic by 18, and Latin by 8. From this it

appears that some Mahomedans and Christians must have taken up Sanskrit as their second language instead of Arabic or Latin.

The failures were in English 230, or 50 per cent. of the candidates attending the examination; in philosophy 195, or 42 per cent.; in the second language 135 or 29 per cent.; in mathematics 127, or 27 per cent.; and in history 112, or 24 per cent.

The philosophy subjects, which all candidates have hitherto been required to take up, were logic and psychology. In future examinations an alternative is offered for the latter subject under the revised University regulations. An option will be allowed between psychology and the chemistry of the metalloids, and a considerable number of students now in their second year have given a preference to chemistry, and are preparing themselves in that subject instead of psychology. The first year students are still more largely electing in favour of chemistry, but they will only commence the subject when they enter on their second year's course in January 1874. The Principal of the Presidency College reports that in the coming session he expects his second-year students will be almost unanimous in their choice of chemistry, and the tendency appears to be the same in all colleges.

It has been proposed to extend the system of options, so as to admit of a larger proportion of physical science subjects being taken up for the F.A. examination; and in order to clear the way for this, the Director laid a proposal before the Syndicate for a further amendment of the regulations restricting the compulsory study of a classical language to the Entrance examination (in which he suggested that a low test should be fixed for all candidates), so that English should be the only compulsory language subject for the F. A. examination, as it now is for the B.A. degree; but the Lieutenant-Governor did not altogether approve of this scheme, being reluctant to enforce the study of a classical language for the Entrance test, and the proposal was not pressed.

The 50 senior scholarships which are awarded annually on the results of the F.A. examination, were this year distributed as shown below:—

COLLEGES.			SCHOLARSHIPS.	
			1st Grade Rs. 25 a month.	2nd Grade Rs. 20 a month.
Presidency College	..	..	10	18
Sanskrit College	..	..	0	1
Free Church College	..	..	0	3
General Assembly's College	..	..	0	1
St. Xavier's College	..	..	0	1
London Mission College	..	..	0	1
Hooghly College	..	..	0	2
Dacca College	..	..	0	3
Krishnaghur College	..	..	0	2
Berhampore College	..	..	0	1
Patna College	..	..	0	6
Cuttack High School	..	..	0	1
Total	..	..	10	40

Under the new rules half the scholarship-holders of the second grade are required to take up the science course for the B.A. degree, or to join the Engineering classes or the Medical College.

The Dutt University scholarships for proficiency in languages and mathematics at the First Arts examination were awarded to Sreesh Chunder Mookerjee and Neel Kant Sircar of the Presidency College. The Gwalior medal was also gained by Sreesh Chunder Mookerjee.

The course for the final B.A. examination extends over the two years succeeding the F. A. examination.

At the examination of January 1873 242 candidates presented themselves against 232 in 1872; 126 passed, 109 failed, and 7 were absent.

Bengal contributed 207 candidates. This is less by 14 than the number of the previous year; but the result of the examination was better, 110 having passed in 1873 against 95 in 1872. The successful candidates were placed 12 in the first class, 51 in the second, and 47 in the third.

The distribution list is given below :—

COLLEGES.	Candidates.	PASSED.			
		1st Class.	2nd Class.	3rd Class.	Total.
GOVERNMENT—					
Presidency College	95	11	27	20	58
Sanskrit College	1	.....	.....	.. ..	.....
Hoghly College	22	.....	6	4	10
Dacca College	11	1	2	3	6
Berhampore College	1	.....	.....	.....	.....
Patna College	13	.....	5	3	8
AIDED—					
Free Church College	18	.....	4	5	9
General Assembly's College ...	20	.....	4	5	9
Cathedral Mission College ...	13	.....	2	5	7
UNAIDED—					
Doveton College	1	.....	.....	.....	.....
Ex-Students and teachers ...	12	.....	1	2	2
Total “... ..	207	12	51	47	110

The subjects of examination were—(1) English, (2) a classical language (the languages this year taken up were Latin, Sanskrit, and Arabic), (3) history (history of India down to 1835, Greece to the

death of Alexander, Rome to the death of Augustus, the Jews to the destruction of Jerusalem), (4) mathematics (mechanics and astronomy), (5) mental and moral philosophy (Hamilton's *Metaphysics*, Fleming's *Moral Philosophy*), and (6) one of the following:—

- (a.) Mathematics (conic sections and optics).
- (b.) Elements of inorganic chemistry and of electricity.
- (c.) Elements of zoology and comparative physiology.
- (d.) Geology and physical geography.

The failures were in English 58, in the classical language 36, in history 7, in mathematics 40, in philosophy 61, and in the optional subjects 33.

In the examination of January 1875 the new regulations will come into force, which lay down two separate courses for the B.A. degree—an A, or literature course, which is a slight modification of the course now in force, and a B, or science course, which excludes all languages except English, and is otherwise confined to mathematics, physical geography, and certain alternative groups of subjects in the physical and natural sciences.

The Director reports that there is every probability that the science course will generally be preferred to the literature course in the Calcutta colleges, where adequate provision has been made for instruction in the science subjects; and he believes that the students in the other colleges will shew the same preference as soon as sufficient teaching power and suitable appliances are secured for them.

Subsequently to the B.A. examination there is an examination for Honors in Arts, success in which entitles a candidate to the degree of Master of Arts.

M.A. examination.

Candidates are eligible to the honor examination under the following regulation:—

"Any candidate who passes the B.A. examination within four academical years from the date of his passing the entrance examination may at the Honor examination next ensuing, or at that of the following year, be examined for honors in one or more of the following branches:—

1. Language.
2. History.
3. Mental and moral philosophy.
4. Mathematics (pure and mixed).
5. Natural and physical science."

Any B.A. of longer standing may be admitted to the Honor examination, and on passing is entitled to the M.A. degree, but does not obtain honors.

There were 19 candidates for honors at the examination of January 1873, and 15 were successful, 2 being placed in the first class, 5 in the second, and 8 in the third. Of the successful candidates, 2 obtained honors in natural and physical science, 2 in mathematics, 1 in philosophy, and 5 in English. Ten were pupils of the Presidency College, 1 came from the Hooghly College, 3 from the Free Church College, and 1 from the Delhi College.

For the ordinary M.A. degree there were 11 candidates, of whom 5 passed—1 in physical science from the Presidency College, 1 in philosophy from the General Assembly's College, 2 in English from the Presidency College, and 1 in English from Canning College, Lucknow.

The examination for a Studentship on the foundation of Prem Chund Roy Chund resulted in the election of Girija Bhushan Mookerjee, M.A. of the Presidency College, who took up English, history, and philosophy. This studentship is open to M.A.'s of the Calcutta University. It is of the value of Rs. 2,000 per annum, and is tenable for five years.

It was noticed in the last report that the Lieutenant-Governor being anxious to provide extended means for the teaching of the physical and natural sciences, in their relation especially to agriculture, had moved the Secretary of State to select and send out to Bengal two science professors, who should be able to teach the following subjects of the University science course—physical geography, chemistry, general physiology, vegetable physiology, and botany.

This requisition has been complied with, and two gentlemen, Mr. Pedler and Dr. Watt, have been sent out, one able to teach chemistry and to conduct analyses, the other trained in agricultural botany and vegetable and animal physiology. Both gentlemen have been placed in the third grade of the education service. Mr. Pedler has been appointed to the Presidency College, and Dr. Watt to the Hooghly College, where his services will be available in connection with the Civil Service classes as well as for the instruction of the general students. Arrangements have also been made for teaching the chemical course and some other branches of physical science in several of the other Colleges. A considerable supply of chemical apparatus was procured by Mr. Pedler in England under the Secretary of State's orders, and this has now arrived in Calcutta and been placed at his disposal in the Presidency College laboratory.

Grants for similar appliances and for apparatus to illustrate lectures in physics have been sanctioned for other colleges, and their requirements are in course of being supplied.

The new building sanctioned last year for the Presidency College, at a cost of Rs. 3,00,000, is making rapid progress towards completion, and will be ready for occupation in the early part of the session of 1874. Besides providing extended accommodation for lectures, which will afford great relief to both professors and students, who have long been most uncomfortably overcrowded in narrow and ill-contrived class rooms, the building contains well arranged chemical laboratories with proper fittings and apartments for experimental lectures in physics, as well as working rooms for the large department of civil engineering. It is believed that the improved mechanical arrangements thus provided will greatly promote the thorough and practical teaching of all the science subjects and of the technical arts connected with them.

During the present year additional buildings have also been sanctioned for the Patna College to contain chemical laboratories and class rooms for the experimental sciences. The cost will be defrayed

out of the balance of the college building fund raised some years by subscriptions in the Patna division.

In order to assist the aided and other private colleges in Calcutta which may not be able to supply the means of instruction in the experimental sciences, an arrangement has been made to allow their students to attend courses of lectures in these branches at the Presidency College at a reduced fee. This concession has been cordially welcomed, and will probably be taken advantage of largely, when the new building is completed, by the colleges that are conveniently situated in proximity to it.

Thus a good deal has been done in various ways to support the measures of the University for the extension of the science element in the educational scheme. It is hoped that a fair advance has been made, and there is certainly much promise for the future. More teaching power, however, is still required, and in some branches, such as physical geography and natural history generally, there is a want of suitable books adapted to Indian experiences.

This latter point was pressed upon the University by the Senior Board of Examiners of last year. In presenting their report on the result of the B.A. examination, they sent up the following resolution to the Syndicate :—

“That in the opinion of this meeting it is very desirable that elementary text books treating of the natural sciences be prepared specially for teaching these subjects to Indian students. The text books now available, though excellent of their kind, having been prepared for English boys, deal more especially with objects familiar or common in Europe, and have but few references to such as are most interesting and familiar to the Indian learner. This want is more particularly felt in teaching such subjects as zoology, geology, and physical geography.

“This meeting believes that were the want of elementary works adapted for local teaching brought prominently to notice in a report of the Syndicate, or in such other manner as the Syndicate may deem advisable, the attention of qualified persons would be drawn to the subject, and that works of the kind required would before long be forthcoming. The meeting is of opinion that the extension of physical science teaching in India would be greatly facilitated by such aid.”

The Syndicate published this resolution in its last annual report, and expressed at the same time its full concurrence with the Board “in thinking it of the highest importance to the extension of physical science teaching in India that text books in such subjects as zoology, geology, and physical geography, should be prepared, drawing their illustrations from subjects familiar to Indian students,” and it further expressed a hope that this recognition of the want of a suitable series of scientific manuals might induce competent men to undertake their preparation.

The first fruits of this suggestion will shortly appear in a text book on physical geography by Mr. H. F. Blanford, of the Presidency College, which is nearly ready for publication. This is a most timely work, and it is said to be exceedingly well executed. The volume is already printed, and its appearance may be expected immediately.

The professional Faculties of Law, Medicine, and Civil Engineering, are represented in the University, and degrees are granted in each of them.

SPECIAL INSTRUCTION.

Law is taught in nine of the Government Colleges and High Schools; medicine and surgery in the Medical College, Calcutta; and civil engineering in a special department of the Presidency College.

The law classes mustered 425 pupils at the end of the year, against 566 at the same date in 1871-72.

Law.

There was thus a loss of 141 law students. This is partly due to a change made in the University regulations in 1871, which had the effect of temporarily reducing the regular B.L. classes from three to two. From the opening of next session there will again be three regular classes at work, and the number of students may be expected to increase. But the falling off may probably be due in a greater degree to the present state of the legal profession, which has of late become somewhat overstocked and no longer offers the attractions which filled the law classes a few years ago.

The total cost of the Law Department was Rs. 28,648, and the receipts from fees amounted to Rs. 41,282, leaving at the credit of Government a substantial balance of Rs. 12,634.

At the last examination there were 137 candidates for the degree of B.L., of whom three passed in the first class and 72 in the second, while 33 others having only attained the standard of marks for a license, were passed as Licentiates. The following table shows the colleges from which the candidates came, and the results of the examination :—

COLLEGES.	Candidates	PASSED.			
		1st Class.	2nd Class.	L.L.	Total.
Presidency College	90	....	49	25	74
Hoochly College	9	..	3	4	7
Krishnaghur College	14	2	8	2	12
Berhampore College	1	.....	1	...	1
Patna College	7	1	5	1	7
Dacca College	4	.....	4	.....	4
Cuttack High School	1	... ..	.....	1	1
Gowhaty High School *	1	..	1	.....	1
Canning College, Lucknow . . .	1	... ..	1	.....	1
Total	137	3	72	33	108

L. L. examination.

For the License in Law there were 93 candidates, of whom 44 were successful as shown below :—

Colleges.	Candidates.	Passed
Presidency College	58	23
Hooghly College	9	4
Krishnaghur College	5	2
Berhampore College	7	4
Patna College	2	2
Dacca College	9	6
Queen's College, Benares. .	2	2
Canning College, Lucknow	1	1
Total	93	44

At the L.L. examination of the preceding year the number of candidates was 58. The large increase this year was no doubt occasioned by the announcement of the University that this would be the last examination for the License in Law. It has since been notified that one more examination will be held in January 1874.

In the English Department of the Calcutta Medical College, which is at present open to any student who has passed the University Entrance Examination, the roll number of students on the 30th March 1873 was 295, against 247 at the same date in 1872. The cost of this Department was Rs. 1,23,030, of which Rs. 1,05,116 was defrayed by State grants and Rs. 17,914 from fee receipts. The corresponding figures for the previous year were,—State grants, Rs. 95,990; fee receipts, Rs. 16,150. The annual cost of each student to Government was Rs. 381, as calculated on the average number on the rolls monthly.

The course of study extends over five years. At the end of the first three years the students are eligible for admission to the University's first examination in Medicine and Surgery, and having passed this they are admitted, two years later, to the final examination for the License in Medicine and Surgery. For the first examination there were this year 78 candidates, of whom 31 passed, all in the second division. At the final examination 52 candidates presented themselves, and 25 of these passed in the second division.

Besides the English Department of the Medical College, there are two vernacular departments—the Bengali classes, containing 451 students at the end of the year, and the Hindustani classes, containing 101 students. The corresponding numbers in the previous year were, Bengali students 336, Hindustani students 118.

There has thus been a gain of 115 students in the Bengali classes, and a loss of 17 in the Hindustani classes.

The Bengali classes cost Rs. 29,241, of which Rs. 12,732 was defrayed from fee receipts and Rs. 16,509 from State funds.

The Hindustani classes cost Rs. 31,155, of which Rs. 31,028 came from Government.

The Hindustani students are all stipendiaries, and are in training for army purposes as hospital assistants. The number of these who passed their final examination this year was 29; only 10 passed in the previous year.

Of the Bengali students, 50 passed their final examination during the year in the grades of Vernacular Licentiate, and Native Apothecary. In the preceding year the corresponding number was 39.

During the last ten years the fee receipts in the English and Bengali Departments have increased to a remarkable extent—the English Department produced in 1863-64 Rs. 4,521, and the Bengali Department, then in its infancy, Rs. 341. In 1872-73 the fee receipts in the English Department were Rs. 17,887, and in the Bengali Department Rs. 12,670; there has thus been an aggregate increase of fee income from Rs. 4,862 to Rs. 30,568.

The great and rapidly increasing influx of students, especially in the Bengali Department, has now made fresh arrangements necessary. The class-rooms had got to be overcrowded to an intolerable degree, and many students could neither hear nor see the lecturers, besides which no sufficient clinical instruction could possibly be given. The exigencies of the case were urgently represented by the College authorities and by the Director. In this state of things the Lieutenant-Governor, having carefully inquired into the matter, and consulted the head of the Medical Department, has lately decided on removing the Bengali classes from the Medical College and locating them at Sealdah, in connection with the Pauper Hospital maintained there by the Calcutta Municipality. The Justices have consented to make over the management of the hospital entirely to Government, and have engaged to give an annual contribution of Rs. 30,000 for its support, on the understanding that 300 beds are maintained for patients. Dr. Woodford, the Professor of Medical Jurisprudence in the Medical College, who has been in charge of the Sealdah Hospital, is put at the head of the school now attached to it, and the native medical teachers have been transferred there with their pupils.

The Lieutenant-Governor has also agreed to the establishment of Medical Schools at Dacca and Patna, but arrangements for these are not quite completed. They are, however, in rapid progress.

The Hindustani class will be transferred to Patna as soon as the new school can be established there.

The Engineering Department of the Presidency College has steadily increased in numbers for some years past. It contained 84 regular students in 1870, 103 in 1871, 116 in 1872, and 133 in 1873. A special class was added in June 1872 for candidates desirous of qualifying to pass the tests in Engineering and Surveying prescribed for the Subordinate Executive Service; the attendance in this class was necessarily somewhat irregular, but much was done to qualify candidates.

There were 2 candidates for the degree of B.C.E., of whom 1 passed and 1 failed. For the License in Engineering there were 14 candidates, of whom 7 passed.

The eight candidates thus passed are admissible to the grade of Assistant Engineer in the Public Works Department. Besides these, one student passed out of the College in the grade of Sub-Engineer and two others in the grade of Sub-Overseer.

Scholarships of Rs. 50 a month were awarded to five of the Licentiates, tenable for two years, during which time they will be attached to works in progress at the Presidency, in order to acquire some practical knowledge of their profession. Two others have been appointed to surveying teacherships in schools.

The fees received during the year amounted to Rs. 9,620, against Rs. 6,568 in 1871-72, and the expenditure was Rs. 39,346, against Rs. 30,416.

In the present session there has been a large influx of students, which has necessitated the appointment of two ex-students of the College to be assistant lecturers. It has also been necessary to make temporary provision for additional class-room accommodation. This at present occasions much inconvenience; but there will be ample space in the new building, and it is hoped that the classes will be transferred to it before the hot weather vacation.

The Government School of Art in Calcutta is steadily increasing in numbers, and within the limits of its objects its work is thoroughly efficient.

At the end of 1871-72 the attendance was 76. At the end of 1872-73 it was 94, and during this year no fewer than 160 students had received instruction in it for longer or shorter periods. It is principally confined to decorative art at present, though the Lieutenant-Governor has much wished to introduce practical arts.

In March last, under the special orders of His Excellency the Viceroy, an exhibition was held in Calcutta of specimens of the work executed in the several Art Schools established in different parts of India, in which the products of the Calcutta School were declared to possess very considerable merit. The Hon'ble Sir R. Temple was President of the Exhibition Committee, and the following passage from his address to the Viceroy on the closing of the exhibition well describes the character of the School and the merits of its performances :—

“The Calcutta School is for fine art and design alone. It is of more limited scope than the other schools, but within that scope it is excellent. Its display of drawing with light and shade, of lithography, and of wood engraving, is very good : a true sentiment for art pervades its designs. Its water-colours of snakes are excellent. The studies of heads by one of its pupils, Bagchi, show remarkable merit and originality, very creditable to Bengal and Bengalis. It has not much in the way of sculpture, or of modelling, or of decorative work in colours. It exhibits drawings of figures, some good, others defective. On the whole it is, within its scope, very efficient so far as we can judge, and redounds to the credit of its talented Principal, Mr. Locke, who works single-handed.”

At the end of the year there were 26 Government Normal Schools in operation for the training of school-masters with an attendance of 1,319 pupils. The returns show that 127 pundits, or higher vernacular

teachers, and 318 gurus, or primary village schoolmasters, had obtained certificates of qualification from these schools in the course of last year.

The whole of these schools have been brought under review during the present year, and a new scheme has been sanctioned, which provides for the establishment of a separate Normal Training School for almost every district.

Under this scheme there will be—

Nine first grade Normal Schools costing on an average about Rs. 7,100 per annum, including an allowance of Rs. 3,600 for stipends for pupils in training.

Twenty-two second grade Normal Schools, each costing Rs. 2,880 per annum, of which Rs. 1,440 is allowed for stipending pupils.

Fifteen third grade Normal Schools, each costing Rs. 1,980, of which Rs. 960 is for stipends.

At the first grade Normal Schools half the stipends are allotted to pupils in training as primary village schoolmasters, and half to pupils qualifying for masterships in middle class vernacular schools. At the second and third grade Normal Schools all the stipends are allotted to pupils in training for primary schools. Courses of instruction have also been laid down corresponding to the requirements of the different classes of schools. For primary school teachers the course is intended to occupy the pupils for a period of two to six months. The full course for the higher class of vernacular school teachers extends over three years, but the course laid down for the first two years will be held a sufficient qualification for many teacherships.

Besides the Government Normal Schools there are 17 Aided Schools for training masters and mistresses, for the most part under the management of the various Missionary bodies. These contained 1,986 pupils at the end of the year, and cost Government Rs. 15,993. The Missionary Schools are mostly employed in training primary village teachers amongst the different aboriginal races, such as Khasiyas, Kaoharis, Kols, and Sonthals; for this purpose they are most valuable, and could hardly be replaced by any other agency.

On an earlier page of this report allusion has been made to the establishment of annual examinations at which young men may prove their fitness for executive and other appointments in the Native Civil Service.

NATIVE CIVIL SERVICE CLASSES AND SYSTEM OF EXAMINATION.

There have already been held two such annual examinations, and the third examination will take place immediately in February. At the examinations held in January 1873 there were two hundred and thirty-eight candidates, of whom one hundred and twenty-three competed for the higher, and one hundred and fifteen for the lower, class of appointments. Fifty-eight candidates were passed or recommended to be passed for the higher class, and eighty-six for the lower class of appointments. On this occasion, in order to have a sufficient number of men to choose from for present requirements, the Government were very liberal in admitting candidates who gave evidence of practical ability, even though they fell a little short of full passing marks.

Endeavours have now been made to place these examinations and the preparatory classes for them on a permanent footing. It has been declared that all appointments in the Subordinate Executive service, and all posts of Rs. 50 monthly salary and upwards in the sub-divisional executive establishments, both in Regulation and Non-regulation Provinces, will ordinarily be reserved for persons who pass the Native Civil Service Examination; and that gazetted appointments in the Police and Opium Departments would also generally be conferred on persons who pass this examination. A list of the persons who had passed the Native Civil Service Examinations of 1872 and 1873, showing the appointments they have held, was published, and it was shown that the successful candidates had almost without exception been absorbed into the subordinate executive services of Government.

Detailed rules for the Native Civil Service Examination of 1875, which it is hoped will be of permanent application and for the regulation of the Native Civil Service classes, have accordingly been drawn up and published in the *Gazette*. The most salient features of these rules are as follow :—

Examination rules.

There are certain preliminary requirements which every candidate for the Native Civil Service Examinations must satisfy. He must furnish a certificate of character as prescribed by the rules, and certificate of sound health, and a certificate of ability to ride and walk.

Preliminary requirements.

Subjects of examination.

The subjects of examination, as rule, have been advertised to be—

The Vernacular.
Chemistry.
Botany.
Law.

Drawing.
Engineering.
Surveying.
Gymnastics.

If, however, candidates have served Government for three years as indicated below, the only obligatory subjects in the examination are :

The Vernacular.
Law.

Drawing.
Surveying.

and candidates who can produce certificates of having passed specified University Examinations in certain subjects, are exempted from those subjects.

The following persons having first complied with the preliminary requirements and passed the required standard at the examination, are declared eligible to all appointments in the Native Civil Service :—

Eligibility of candidates.

- (1) Persons who have served Government for six years.
- (2) Persons who have passed the Entrance Examination, and have served Government for three years.

Provided that they have in cases (1) or (2) attained and have held for not less than one year a responsible permanent appointment, above that of copyist, with a salary not less than Rs. 25 in one of the civil departments of the Government service, and can produce a sufficient certificate of ability, good conduct, and fitness for promotion from their official superiors.

(3) Persons who have taken a University degree in arts, law, medicine, or engineering.

(4) Persons who, having passed the First Arts Examination or an examination of corresponding degree in one of the special Colleges, attend the Civil Service classes for one year and acquit themselves well at the Native Civil Service examination.

(5) Persons who having passed the Entrance Examination attend the Civil Service classes for two years and acquit themselves well at the Native Civil Service Examination.

(6) Persons who may be specially declared eligible for all appointments by a certificate under the hand of a Secretary to Government.

The following persons having passed the preliminary requirements and the examination, are eligible to appointments of less than Rs. 100 per mensem :

(1) Persons who have served Government with credit and efficiency for not less than three years, whose thorough facility in the use of the vernacular is certified, and who pass a preliminary examination in English.

(2) Natives of Hindustan, Orissa, and Assam, natives of Bengal of Mahomedan families, and natives of any other districts which may be hereafter specially notified, who have served Government with credit and efficiency for not less than three years, and who can show that they have received a thoroughly good education in the vernacular. This privilege has been limited to two years from the date of the publication of the rules, and such persons have been given to understand that they cannot expect advancement unless they qualify in English, that being the language of official correspondence in Bengal.

(3) Persons who have passed the Entrance Examination.

(4) Persons who may have been specially declared eligible for appointments of the lower grade by a certificate under the hand of a Secretary to Government.

Examinations will be held in 1875 and in future at the important

Places of examination. mofussil stations of Hooghly, Dacca, Patna, Cuttack and Gowhaty, which experience has shown are the places most suited for the purpose.

It will have been seen that some of the subjects required for the Native Civil Service examination are not taught in the ordinary course of all Bengal Colleges, and the Lieutenant-Governor has accordingly arranged for instructing persons who desire to qualify for that examination. There are under the rules two classes of persons eligible for the higher class of Native Civil Service appointments, namely—

(1) Men who have served Government for three or more years in responsible posts.

(2) Young men who have not so served Government for three or more years.

The latter class of candidates have to pass in more subjects than the former. For those who have not served, the Lieutenant-Governor would establish a Civil Service course at the Hooghly and Patna Colleges; and

For non-service-holders.

for those who have served, special classes will, if there be a sufficient number of candidates, be established at the Presidency, Hooghly, and Patna Colleges.

For candidates who have passed the F.A. or B.A. examination, or any corresponding examination in the special colleges, the one-year Civil Service course, will include—

- (1) The chemistry lectures being delivered to the II year students reading for the F.A. examination.
- (2) The botany lectures being delivered to the III or IV year students.
- (3) A special course of law lectures from the Civil Service classes lecturer.
- (4) A special course of teaching from the teacher of surveying, &c.

The students of this one-year Civil Service course will have to go up for the ordinary University F.A. and B.A. examination papers in chemistry and botany, and will be examined in law and surveying, &c., at the Native Civil Service examination.

From candidates who have passed only the Entrance Examination, a two-year Civil Service course will be required. These candidates will, during their first year, attend the ordinary college lectures for first year students in English, in history, in mathematics, and in natural science; while they will attend special classes in drawing, surveying, &c., in place of either a second language or psychology. They will not be allowed to go on to the second year unless the Principal of the College certifies that they have done creditably in the first year. During their second year they will join and attend the same lectures as the candidates referred to in the next preceding rule. The students of the two-year Civil Service course will pass the ordinary college examinations at the end of their first year; and at the end of their second year they will go up for the same examinations as the candidates of the one-year course.

All scholarships granted by the Bengal Government have been declared tenable at Civil Service classes just as at any affiliated college.

For the candidates who have served Government, the Lieutenant-

For service-holders.

Governor will establish a four-months course, from the 15th September to the 15th January at the Presidency, Hooghly, and Patna Colleges, provided that at least 25 intending candidates for this class present themselves for admission before the 15th September 1874. The Principal will have discretion to admit to this special class any candidate who, holding a University certificate in science, law, or engineering, has only a few subjects to prepare for the Native Civil Service examination. The Principal can also admit to this special class any persons who may be declared to be specially eligible either by the Government or by the Commissioner. Service-holders and others intending to enter for this four-months Civil Service course have been warned that they will have to practise mensuration and drawing before they come, since they will

find it difficult to get through the subjects in four months. They will receive lectures in law from the Civil Service lecturer, and will be instructed in drawing and surveying by the special teacher.

The object of these rules, which are now being gradually brought into operation by the agency of the Educational Department, has been to

Object of the rules.

insist on a regular course of instruction for young men who wish to enter the service for the first time. They will be obliged to attend the Civil Service course and submit to acquire the necessary qualifications for service under Government. "The plan is," as has been stated, "that after a young man has carried his general education to the point at which he is allowed to commence a special education for a profession, *e.g.*, in medicine or engineering, he should similarly be allowed at the same point to commence a special Civil Service course designed to qualify him for that profession." Tried men of experience, on the other hand, are allowed certain privileges, at least for the present, and special short courses are provided for them by which they may acquire special knowledge and subject themselves at the same time to a test of their general efficiency.

The returns of the two Mahomedan Madrissas show a considerable aggregate increase in their attendance rolls, the number of students in the

MADRISAS.

Madrissa proper or Arabic Department on the 31st March 1873 having stood at 177, against 114 at the same date in 1872; but the increase has been entirely in the Calcutta institution, where the students have risen from 72 to 153. In the Hooghly Madrissa the number had fallen from 32 to 24.

The increase at Calcutta is due to the withdrawal of the regulation passed on the recommendation of the Madrissa Committee which made the study of English obligatory on all the students from the commencement of the previous session. Throughout the year 1872 it became evident that the study of English was very distasteful to the students who resort to the Madrissa for the study of the Mahomedan religion and law. A petition was presented to the Lieutenant-Governor praying that it might cease to be obligatory. On this it was decided that the study of English should be made optional, and a similar option was subsequently extended to the study of Bengali. As soon as this decision was made known, the classes again began to fill rapidly.

At the date of last report there were only eight students of Arabic of the Calcutta Madrissa learning English and four learning Bengali, but the modern or Anglo-Persian Department contained 375 students.

During the present year the whole question of State education in relation to the Mahomedans of Bengal has been carefully reviewed, and an

MAHOMEDAN EDUCATION.

attempt has been made to provide more fully for the special wants of this important section of the community. With this view it has been decided that the Mohsin Endowment Fund, amounting to Rs. 55,000 per annum, hitherto devoted to the maintenance conjointly of the English College and the Madrissa proper, or Arabic Department, at Hooghly, shall in future be appropriated exclusively to the promotion

of Mahomedan education throughout the country, and particularly to the establishment of several new Madrissas to be engrafted on to existing Colleges and High Schools at the centres of Mahomedan population. The Government of India has, in furtherance of this arrangement, made an addition of Rs. 50,000 to the grant for education in Bengal in order to provide for the continued maintenance of the English College at Hooghly on its present footing; and the income of the endowment fund thus set free, together with the present grant of Rs. 38,000 for the Calcutta Madrissa, amounting in the aggregate to Rs. 93,000, has been re-appropriated in the following manner :—

				Rs.
Calcutta Madrissa	...	...	...	35,000
Hooghly Madrissa	...	...	...	7,000
A new Madrissa at Dacca	...	...	...	10,000
Do. do. at Chittagong	...	...	...	7,000
Do. do. at Rampore Beaulah	...	...	...	7,000
For the 9 zillah schools of Jessore, Rungpore, Patna, Furreedpore, Backergunge, Mymensing, Tipperah, Noakhally, and Sylhet, at the rate of Rs. 800 each, partly to pay the school fees of Mahomedan students, and partly to provide salaries for teachers of Arabic or Persian	...	...	...	7,200
For the Presidency College and other Colleges to which a Madrissa is attached, to meet the fees of Madrissa students attending such colleges	...	...	...	8,000
For Mohsin scholarships for the encouragement of Mahomedan students who succeed in English studies and physical science, tenable in the General or Special Colleges	...	...	...	11,800
			Total	93,000

The arrangements thus sanctioned are not yet matured, but the new Madrissas at Dacca and Rampore Beaulah are on the point of being opened, and the Chittagong Madrissa is expected to be established without much delay.

The establishment of the Calcutta Madrissa has been revised, but final arrangements cannot be made till a decision has been come to on the appointment of a Principal. The new 6th and 7th classes of the Arabic Department, which were opened in January 1873, did not work well, and have now been abolished. This department will in future consist of five classes as before, but the Branch School is to be converted into a preparatory school to educate boys before admission to the Arabic classes. There is to be an examination for such admission, and applicants are not to be admitted till they can read and write some language in the Persian character.

The changes to be made in the Hooghly Madrissa are still under consideration.

There are 47 Mahomedans in the general colleges, 43 in special colleges, and 177 in Arabic Madrissas. The rest in schools of different

classes of which we have yet full returns are distributed amongst the several divisions as follow :—

		Mahomedans.	Hindoos.
Rajshahye Division	...	21,751	28,422
Presidency	...	14,679	61,996
Dacca	...	11,303	34,919
Chittagong	...	3,810	7,176
Burdwan	...	2,062	48,303
Cooch Behar	...	1,332	2,631
Patna	...	1,135	4,613
Assam	...	843	8,741
Calcutta	...	572	9,889
Chota Nagpore Division	...	544	10,945
Orissa	...	512	8,453
Bhaugulpore	...	499	1,684
		<hr/> 59,042	<hr/> 227,772

From these figures it results that the Mahomedans are 4 per cent. of the students in the general colleges, $5\frac{1}{2}$ per cent. in the special colleges, and over $19\frac{1}{2}$ per cent. in schools of all classes. Probably when we have returns of all the new patshalas, the proportion of Mahomedans will be larger.

The returns do not shew the distribution of the Mahomedans amongst the different classes of schools, but everywhere, except to some extent in Behar, the upper castes of the Hindus form the mass of the pupils in the higher and middle schools. This ceases to be the case in the lower or primary schools, which attract in considerable numbers the Mahomedan cultivating classes.

The grant-in-aid rules have been revised and settled during the present year. These rules apply to grants other than those to the village patshalas. The whole sum assigned for grants under these rules, amounting to Rs. 5,20,100, has now been distributed amongst the several districts with reference partly to their population and partly to the amounts of the grants-in-aid at present allotted in them to schools already in operation. This sum is largely in excess of previous grants for this purpose; two years ago the amount granted was Rs. 4,44,606.

The allotment of the district grant is placed in the hands of the District Committee of Public Instruction, subject to the approval and confirmation of Government through the Director of Public Instruction. The grants will not exceed for colleges one-third, and for higher schools one-half of the income guaranteed from private sources. For middle schools, in which the expenditure is more than Rs. 30 a month, the grants will not in general exceed two-thirds of the guaranteed private income, but an exception is allowed in the case of certain backward districts in which the grants may be equal to the income so guaranteed.

For lower schools, as well as Girls' schools, and Normal and other special schools, the grants are not to exceed the full amount of the guaranteed local income.

These rates are maximum rates, and the maximum grant allowable is not to be sanctioned anywhere as a matter of course, and will only be given in very exceptional cases in some of the most advanced districts. Grants are to be ordinarily made for periods of five years, and it is expected that in case of renewal at the expiration of five years the amount of the grant will generally be reduced so as to set free funds for aiding new schools, even if the district allotment should remain stationary.

It is also provided that in certain backward districts grants may be allotted under special regulations depending on the attainments of the schoolmasters, or of their pupils, or in the shape of a capitation allowance for regular attendance.

These rules, as now revised, have not been long in operation, but they seem to be working satisfactorily, though some changes of detail may perhaps be required in regard to the arrangements for checking the school bills and passing them for payment. In other respects they have in general been favorably received, but the Director reports that much complaint is made by some of the more advanced districts regarding the smallness of their allotments, which makes it impossible for them to give assistance to many new and deserving schools that apply to them for grants.

The following tables give the general statistics of the Education Department for the year ending the 31st March 1873.

General statistics.

1. *Return of attendance in Colleges and Schools for general instruction, as on 31st March in the years 1872 and 1873.*

Colleges and Schools for general instruction.	Number of Colleges and Schools on 31st March.		Number of Pupils on 31st March.	
	1872.	1873.	1872.	1873.
<i>Colleges and Schools receiving State Grants.</i>				
SUPERIOR INSTRUCTION—				
Colleges affiliated to the University in Arts—				
Government Colleges	9	10	980	858
Private Colleges, aided	5	5	357	305
	14	15	1,287	1,163
SECONDARY INSTRUCTION—				
Higher Class, English Schools—				
Government Schools	52	57	10,282	11,073
Private Schools, aided	78	78	8,112	7,789
	130	135	18,394	18,862
Middle Class, English Schools—				
Government Schools	9	4	902	487
Private Schools, aided	477	428	23,492	21,551
	486	432	24,394	22,038
Middle Class, Vernacular Schools—				
Government Schools	213	194	11,740	11,020
Private Schools, aided	763	748	33,962	33,487
	976	942	45,702	44,507
PRIMARY INSTRUCTION—				
Lower Class, Vernacular Schools—				
Government Schools	20	29	586	896
Private Schools, aided	618	529	18,377	17,200
Patchalas, aided	1,813	8,078	45,916	197,315
	2,451	8,636	64,779	215,411
INSTRUCTION FOR FEMALES—				
Government Schools	2	1	118	85
Private Schools, aided (including zenana schools) ...	297	244	8,040	7,190
	299	245	8,158	7,275
Total of Colleges and Schools for general instruction, receiving State grants.	4,356	10,405	162,714	309,356

2. *Return of attendance in Colleges and Schools for special instruction, as on 31st March in the years 1872 and 1873.*

Colleges and Schools for special instruction.	Number of Colleges and Schools on 31st March.		Number of Pupils on 31st March.	
	1872.	1873.	1872.	1873.
SPECIAL INSTRUCTION—				
Law Departments, affiliated to the University	8	9	506	425
Medical College, English Department, affiliated to the University	1	1	247	205
Engineering Department, affiliated to the University ...	1	1	116	135
Civil Service Departments ... ..	.....	2	... ..	117
Madrasahs	2	2	114	177
Medical College, Bengali Department	1	1	336	451
Medical College, Hindustani Department	1	1	118	101
School of Art	1	1	76	94
Normal Schools for Masters—				
Government Normal Schools	26	26	1,417	1,819
Guru training classes (temporary) ... ..	.....	7	... ..	145
Aided Normal Schools	15	13	430	606
Normal Schools for mistresses ... ..		...		...
Aided Normal Schools		4		61
Total of Colleges and Schools for special instruction	56	68	3,426	3,926

CHAPTER XXIX.

LITERATURE AND ART.

THE past year has witnessed the publication of Colonel Dalton's great and elaborate work on the Ethnology of Bengal. The merits and value of this work are so universally admitted, that it would be superfluous to dilate on them in this place.

Special works.

Vvaluable acquisitions have also been made to our permanent knowledge of these provinces, and to Indian literature, by the publication of Mr. Toynbee's compilation on the History of Orissa, and of a Statistical Account of Rungpore by Mr. Glazier, the Collector of that district. Messrs. Glazier and Toynbee's works were printed by Government, and had their origin in a Circular which the Lieutenant-Governor issued in 1871, commending to the attention of district officers such works as the Statistical Account of the Dacca division, and Mr. Westland's book on Jessore; and intimating that similar works would always earn the special approval of Government. Mr. Toynbee carries his political and fiscal history up to 1828, in which year Orissa was divided into three districts—Cuttack, Balasore, and Pooree. He hopes to be able to continue it for Cuttack specially, if possible. The interest of Mr. Toynbee's work is enhanced by the full appendices, which contain a re-publication among other papers of Mr. Sterling's valuable note on Orissa tenures, which had already become a very scarce pamphlet, though once published as a Government selection. Separate Manuals for the districts of Pooree and Balasore are in progress. Mr. Glazier's work is an historical and statistical account of the district of Rungpore up to the present time, and contains a very complete appendix by Mr. J. Crawford on the agricultural condition of the district.

Other important books have been published by Government as selections or otherwise. A Memorandum on the Revenue Administration of Bengal, which contains a mass of very useful information, was prepared by Mr. D. J. McNeile, the Secretary to the Board of Revenue, under the orders of the Member in charge. The reports of Commissioners on the indigenous agency of Bengal, elicited in the census operations, are of much interest, and have been published as selections. The report of the special statistical Deputy Collector, Baboo Ram Sunker Sen, on the sub-divisions of Jhenidah and Magoorah, in Jessore, has been printed by Government and circulated. It is most useful and

instructive, and will form the nucleus of much further similar inquiry. The reports of the local officers on tea cultivation, and a valuable note by Mr. J. W. Edgar, c.s.i., on the subject, have been similarly republished. Some of the best of the local administration reports received his year are being also reprinted and circulated.

The non-official publications of any consequence are very few indeed. Very much the largest number of books were intended, as usual, for the use of students in schools and colleges. Fourteen dramatic works were published in Bengali, which are said to contain original matter, and three translations; but they are all of little merit. There were twenty-three Law books; seventeen works on Medicine; and fifty Poetry books, published.

Altogether 880 books, periodicals, and pamphlets, were registered in the office of the Inspector-General of Assurances, and 202 in the Sub-Registry Offices of the interior. The total number registered was 1,082, against 1,206 in 1870-71, a decrease of 124, or 10·28 per cent. in the number. This was owing partly to the orders issued by the Government of India in 1871 exempting the registration of reprints of books, decisions of courts of law, &c., and partly owing to the undoubted decrease in the number of books published during the year. In Calcutta particularly there was a falling off in the number from 1,000 in 1870-71 to 880 in 1872-73. The decrease is not sufficiently explained.

The number of books received, exclusive of monthly and quarterly periodicals, amounted to 675: of these, the number of purely Bengali books was 366, of English 116, of Sanscrit 63, of Ooriyah 27, of Oordoo 12, of Persian 3, of Sonthali 2, of Arabic 1, of Mussulman Bengali 4, of Lepcha 1, and of Assamese 1. There were also 79 books bi-lingually and tri-lingually arranged.

There are altogether 20 English newspapers published in Bengal, of which 15 are edited in Calcutta. Of the remainder, one is published at Dacca, one at Darjeeling, and three at Serampore in the Burdwan division.

The number of vernacular papers supplied to the Bengal Library in 1872-73 was 36—of which 3 were daily, 1 tri-weekly, 1 bi-weekly, 19 weekly, 8 bi-monthly, and 4 monthly. Six ceased to exist during the year; but 10 new papers were started, of which 3 are bi-monthly and 7 weekly journals. The total number of journals supplied at the end of 1872-73 was 40. Of these no less than 13 are published in the Dacca division, 5 are published in the Rajshahye division, 4 in the Presidency (excluding Calcutta), 3 in Burdwan, and 3 in Assam; 2 in Patna, and 2 in Orissa. Eight native newspapers are printed in the town of Calcutta. In the divisions of Bhaugulpore, Chittagong, and Chota Nagpore, no newspapers are published.

The native press in Bengal is still comparatively in its infancy, and has but little influence in a country where only a very small portion of the people can read or write.

The circulation in the Mofussil is small, the principal readers being the Government servants and people who make their daily bread in Government schools, or offices and public courts; who read the papers more for the scraps of news on social and local matters than for the purpose of imbibing opinions on political or other subjects. The vernacular papers, as a rule, are not important. They show a great tendency towards class feeling, and sometimes are too ready to attack individuals, and especially Government servants of all ranks.

At the same time, although the influence of the press is undoubtedly small, it does produce an effect indirectly, and after the lapse of a considerable interval. It has been said by some that the result of the influence, such as it is, is probably as much for evil as for good. Much of the feeling of distrust towards Government, which has been lately so much the subject of comment, has been attributed to its action. The classes who have received a high education gradually disseminate among the people the views they have imbibed from their favorite newspaper, and the opinions of the native press are in this way strenuously supported by many who never saw a newspaper, and would be quite unable to read one if they did.

The ordinary village population of Bengal are a respectable, decent, and quiet class. It is generally indeed assumed from the tone of the native press that the educated natives are not very loyally disposed. The Lieutenant-Governor, however, does not doubt that this class also is in reality loyal: all their aspirations are in directions in which we have taught them to look, and they know very well that their position would have been very different under any other rule. They are only a little too hasty in imagining that they can surpass us in our own qualities. We ought, as one Collector has truly said, to make great allowances for the feelings of persons governed by foreigners, whose manners and customs are perfectly unknown to most of the people, and are imitated rather than adopted by even the most advanced. Under such circumstances it is not strange if sometimes motives are misunderstood and facts distorted. His Honor is perfectly certain that the people really appreciate the good will of Government and of its officers to them, and desire no violent radical changes.

The regulation of the native press is quite beyond Government control. It is allowed perfect liberty of expression, and it

License of the Vernacular Press.—Evils which sometimes result from this license.

has been strongly represented that among other evils this present unbridled license is found to affect officers of Government to an extent which is detrimental to the upright and fearless discharge of their official functions. "I fear," writes one very experienced Commissioner, "that there is not a native Deputy Magistrate in the country who could deny that he was afraid of becoming the subject of any personal attack in a native newspaper. There are doubtless very few European officers, even of high position, who would not also object to it; for with very rare exceptions we wish at least not to be noticed in the public press, as their praise is as likely to do us harm as their blame is. But the case of a native Deputy Magistrate and his subordinates, especially at an isolated sub-division, is very different. He knows very well that the moment that any

scoundrel denounces him in a native paper, not only must he endure the local wit and ridicule and annoyance, but he has to await the publication of the Government Translator's abstract of the native papers, and the almost inevitable call for an explanation from some one of his superiors,—from the Magistrate to the Governor-General. I know of scarcely any more exquisite but certain process of torture than that which begins with the publication of a scandalous attack on a public officer, and leads up to a call upon him for explanation. Even if his explanation is accepted, he has gone through the ordeal: he has been mentally tortured, whilst his assailant has lurked in the darkness, and is beyond the reach of punishment. This villainous misuse of the public press affects the whole of the administration of justice by native officers."

There is much in this that is true, and the expediency of continuing to circulate the Government Translator's abstract of the opinions of the native press has been under consideration. The same Commissioner also remarks on the growing practice of native newspapers commenting on, and prejudicing pending cases.

The native press of Calcutta exhibits considerable talent and excessive freedom of opinion. It is no doubt within its sphere an engine of some power.

Of the five papers published in the Rajshahye division, one is published in Moorsshedabad, two in Rajshahye, one in Rungpore, and one at Serajgunge in Pubna.

Several native newspapers are published in the district of Dacca. Backergunge issues sundry papers, of which none are of much consequence.

There is one newspaper published in Mymensing, and that is printed at Dacca. The subscription is only Re. 1-4 per annum. It contains, says the District Officer, articles on religious questions (tenets, orthodox old Hindoo), explanation of the Vedas and Bhagavat Gita, a column of middle aged news, and generally a moral poem, of which the sentiments are excellent and the literary merit very small, entirely free from scurrilous personalities. It is reported of these and nearly all the local papers that they convey but little instruction to their subscribers, and as little profit to their proprietors.

In the Chittagong division, where there are no newspapers printed, and hardly any newspaper readers, the Hindoo Deputy Magistrate of Brahmunbariah makes the observation that the people generally suppose that everything in a newspaper is invariably false,—a remarkable contrast to the popular idea in England among the lower orders, where "I know it is true because I saw it in print," is a common expression.

In Behar there are only two native newspapers, the *Chushm-i-Ilm* and *Akhbar-ul Akhyar*, both Mahomedan, and printed in the Hindustani character. They are fortnightly, and contain little news and little discussion, but are the vehicles for more or less instructive essays,

which few persons will read and pay for. The latter was a publication of the Behar Society, and has fallen off very much, now that it receives no assistance.

In the Orissa division there are two newspapers in Cuttack, the *Utkul Dwipica* and *Utkul Patra*. In Balasore a new magazine, the *Utkul Durpun*, or Mirror of Orissa, was first published last year. It seems that the newspapers in Orissa are actuated by a healthy feeling, and their publication may be taken as an evidence of the awakening intelligence of the Oorials, when it is recollected that in many other and richer districts there are no newspapers at all.

The press is fairly developed in Assam for so remote a province.

There are three local newspapers—two at Seebisagur, and one at Gowhaty, of which the *Assam Mihir* is the best. The influence of the Assam press, so far as it exists, is said to be beneficial rather than otherwise.

It cannot be said that much has been done in the year under review by Government to foster the growth of Arts and Sciences in these provinces. The subject, however, has not been overlooked, and some action has been taken. The progress of the Imperial Museum has been considerable. It is explained, on another page of the present report, that the Lieutenant-Governor has taken steps for establishing an Economic Museum for the collection of economic, vegetable, and other products of Bengal, and that this museum will be opened immediately.

Some correspondence has also taken place with reference to a site for the proposed Bengal Meteorological Observatory. For years the want of a proper observatory has been very great, and now that so much increased attention is paid in Bengal to meteorological phenomena, and in view of the extreme importance of recording full and correct observations, it has been felt that the establishment of an adequate observatory could not be delayed. After some trouble the Lieutenant-Governor has fixed upon a suitable situation.

The chapter of this report on Education will show the measures that have been adopted for imparting instruction in surveying, botany, and chemistry at our schools. It is hoped that a very decided step in advance has been taken towards the establishment of a scientific educational course, and towards the teaching of practical arts which have hitherto been too much neglected in our system.

CHAPTER XXX.

MISCELLANEOUS.

ECCLESIASTICAL.

THE Ecclesiastical establishment entertained, or partly paid, by
 Ecclesiastical establishment. Government in Calcutta and the dis-
 tricts of Bengal on the 31st of March
 1873 was as follows :—

Lord Bishop of Calcutta	...	...	...	...	...	1
Archdeacon and Commissary to the Lord Bishop	...	...	...	...	...	1
Domestic Chaplain to the Lord Bishop	...	...	...	...	...	1
Registrar of the Diocese	...	...	...	...	...	1
Chaplains of the Church of England	...	...	...	...	...	19
Ditto ditto Scotland	...	...	...	...	...	2
Ministers, Additional Clergy Society	...	...	...	...	...	13
Priests of the Roman Catholic Church	...	...	...	...	...	7

The Lord Bishop of Calcutta in May last was good enough to place
 at the disposal of Government a most
 The Lord Bishop's tour. valuable and interesting account of his
 visitations and proceedings in these provinces during the past year.
 His Lordship visited the whole of Bengal, from Assam to Orissa,
 from Behar to Backergunge, and his notes not only put in a very
 convenient shape the ecclesiastical matters to be brought to the notice
 of Government, but also incidentally throw very much light on
 educational and other matters. With His Lordship's permission His
 Honor circulated the Bishop's letter to the many whom it would
 interest.

The stations of Gowhatty, Shillong, and Sylhet, were placed under
 one chaplain, who would pay migra-
 Churches. tory visits to each. At Comillah
 considerable local subscriptions were raised towards the erection of a
 church, and the full pecuniary assistance allowable under the rules
 was granted by the Lieutenant-Governor. His Honor quite concurred
 with the Lord Bishop in the advantage of having churches at small
 stations. Although the provincial finances were not so prosperous as
 they had been, His Honor would say that wherever there was a
 considerable Christian population and no Christian church or building
 in which most of the Christians might meet, he would be ready to do
 what he could in aid of a church.

A complete set of rules has been framed and circulated for carrying out the provisions of the "Indian Christian Marriage Act, 1872" (No. XV of 1872), and measures have been taken for providing in English as well as in the Bengali and Hindi languages the books and forms to be used under the Act.

A Bill also has recently been proposed in the Bengal Council to facilitate and authenticate the registration of Mahomedan marriages. The nature of this Bill is briefly described at page 93 in an earlier chapter of this report.

Arrangements were made during the year, under the ecclesiastical jurisdiction vested in Government by the Marriage Act No. III of 1872, for persons other than Hindoos, Mahomedans, and Christians. The Registrar of Assurances in Calcutta, and the Sub-Registrars in most of the important sudder stations in Bengal, where their services are likely to be required, have been appointed to be *ex-officio* registrars of marriages under the Act.

Certain non-official Brahma gentlemen have also been appointed registrars of marriages in Calcutta and in the districts of Hooghly and Dacca.

Under Section 12 of the Act it has been ruled that for the present marriages shall be registered by *ex-officio* Registrars only at the office of marriage registrars. If required, a Registrar other than an *ex-officio* Registrar may register at a place other than a Registrar's Office, but an additional fee will have to be paid in such case. The fees to be charged by a marriage Registrar have been prescribed and published, and are very moderate in their incidence. Between March 1872, when the Act came into operation, and the 30th March 1873, six original marriages were solemnized, and twenty-three marriages contracted before the passing of the Act were registered under its twentieth section. It would appear that the arrangements made have given satisfaction, and that the privileges of the Act are appreciated by the Brahma community.

STATIONERY.

The following table exhibits a comparison of the general results of the working of the Stationery Department during the years 1871-72 and 1872-73:—

Statistical results.

	1871-72. Rs.	1872-73. Rs.
Value of stock at the commencement of the year	13,21,359	12,70,438
Approximate value of stores received from England	5,43,841	3,58,571
Value of stores received back from different offices	8,125	4,817
Cost price of local purchases	61,091	50,482
Total value of stock	19,34,416	16,84,308

	Rs.	Rs.
Value of stores issued during the year	6,71,260	7,50,947
Amount of bills passed for purchases in India	543	....
Amount of all other charges, including establishment, contingencies, &c.	32,230	34,540
Total charges ..	7,04,533	7,85,487
Total value of stock at the close of the year	12,70,438	9,33,361

The result shows a decrease in the total outlay for stationery, which is attributed to the careful scrutiny that is now given to the annual estimate of requirements with a view of keeping down the stock to the lowest safe limit. On the other hand, there has been a very general increase in the issues of the various articles of stationery.

The Lieutenant-Governor has desired the Board of Revenue to furnish a report on the quality of the stationery now supplied to Government, and the suitability to the purposes for which it is used, as well as upon the quantity now supplied. Complaints of the deficiency in quantity as well as quantity of stationery supplied have been made; there is good reason to believe that the paper on which Government correspondence is now written is inferior in quality to the old paper of former days. We should certainly test the materials supplied by modern contracts. Records of ten or twelve years old may be seen going into tatters, while those of sixty or ninety years ago remain perfect. Much also of the ease and efficiency of the work of our offices depends, for instance, on the quality of the ink, pencils &c., and the inferiority of the supply of ink from the Stationery Department has now become a source of serious inconvenience. It has been desired that careful attention may be bestowed on these details, and that any causes for complaint may be as far as possible removed.

